

## Message From the President-Elect What Good is ASP?



Many of us attend technical conferences that are directly related to our own research interests. Why do we also join ASP? Why do we attend ASP meetings?

ASP is unique for its interdisciplinary nature. Biology,

chemistry, and physics are united in a common theme – photobiology. I believe that we have some other characteristics in common such as curiosity, a love of learning, and a desire to promote public awareness of scientific findings that affect our health and wellbeing. Many of us are educators and are continually looking for material to make our courses more timely and interesting. Furthermore, regardless of specialization, we all look forward to hearing the latest word on topics such as sunscreens, tanning beds, extinction of frogs, and global warming.

At various times in its history, ASP was very involved in education and public outreach. Committees wrote position papers, high school and college groups were invited to meetings, and members wrote textbooks and lab manuals. One of my goals as an officer of ASP is to revitalize these efforts. I want to provide opportunities that make it easy for members to become involved in public outreach within their specializations. I want us to become a resource for high school and college teachers who are looking for interesting and up-to-date materials. For example, we can share ideas for problem-based learning or answer questions that teachers or students send to us. I want to organize an “Adopt a Photobiologist” program where a middle school or high school class can adopt an ASP member and ask questions about careers and education, as well as questions about specific classroom topics. I want to involve high school teachers and faculty from two and four-year colleges in our meetings and give them materials to take back

### IN THIS ISSUE

Message from the President-Elect .....	1
33 <sup>rd</sup> ASP Meeting .....	2
Letter from the Editor .....	2
Changes for <i>Photochem Photobiol</i> .....	3
New ASP Listserv .....	4
Glossary of Photochemistry Terms .....	5
Encyclopedia of Earth .....	5
ASP Homepage Statistics .....	5
Research by ASP Members .....	6
2007 ESP Congress .....	6
Upcoming Events .....	8

to the classroom that relate to symposia that they have attended. If we have a strong educational emphasis, people will be able to use alternate sources of funding to attend meetings. For example, my college (College of Charleston) has a fund for pedagogical scholarship that would support such travel.

One of my first efforts has been to work with our webmaster **Peter Ensminger** to create a web page that addresses the controversial subject of low level light therapy (LLLT; [www.pol-us.net/lllt](http://www.pol-us.net/lllt)). I hope to clear up some of the gross misinformation that is found on the internet concerning the interaction of light and biological tissues and hope that you will support us by sending in your questions and comments. If you are involved in this field, please send a paragraph about your work. If you have questions, please submit them and we will get answers from our own member experts. If you disagree with anything you see on this page, do let us know. After all, this is a very controversial topic! The general public would benefit from a reasonable debate among scientists with varying opinions. The

(Continued on page 2)

(Continued from page 1)

ASP would also benefit.

My own background is photophysics and photomedicine. The most exciting talk I have ever heard at an ASP meeting was about the extinction of various species of toads and frogs. I went back to my lab and started measuring the optical properties of salamander egg masses! It is crucial for our society to regain the breadth that we've enjoyed in the past. Our president, **Steve Ulrich**, is working hard to create a list of candidates for council positions to better represent all of the divisions. We are determined to represent all of the divisions on council and to include them in meetings as well. I will keep you informed of opportunities for involvement via the listserv (see **Kendric Smith**'s article later in the newsletter). I look forward to sharing ideas with all of you and working towards our common goals within the umbrella of photobiology.

**Linda Jones**

ASP President-elect

[JonesL@cofc.edu](mailto:JonesL@cofc.edu)

## 33<sup>rd</sup> ASP Meeting



Associate members at the 33<sup>rd</sup> ASP Meeting in Rio Grande, Puerto Rico

With the 33<sup>rd</sup> ASP Meeting now four months behind us, it is time to reflect on the highlights of our Puerto Rico meeting. We hope this will inspire other ASP members to help **Steve Ulrich** and **Lisa Kelly** in their planning for the 34<sup>th</sup> ASP Meeting, to be

held in San Francisco during 2008.

First, **Robert Corell** was our keynote speaker on the topic of global climate change. He is an internationally renowned scientist who studies global scale issues involving climate change and has chaired many international efforts on this topic. We were very fortunate to have him as our keynote speaker and greatly appreciate the efforts of **Ed De Fabo** in getting Dr. Corell to talk at our meeting.

There were several other symposia that brought important photobiological information to light on the

(Continued on page 3)

## Letter From the Editor

This issue of the newsletter describes some of the changes that have been brewing since the 33<sup>rd</sup> ASP Meeting in Puerto Rico, a mere four months ago. As of January 2007, *Photochemistry and Photobiology* is moving to Blackwell Publishing. **John Simon** (Editor of *Photochem Photobiol*) and the ASP Council have decided that this strategic move will increase the visibility of our journal and will benefit our society. Later in this newsletter, **Selene Steneck** (Associate Editor at Blackwell) provides an introduction to Blackwell Publishing. All the people at *Photochem Photobiol* look forward to receiving your manuscripts in 2007.

Second, our founding President, **Kendric Smith**, has started an ASP listserv. We hope that this listserv will increase member participation in society matters. One of the most important of these matters is the upcoming ASP meeting in San Francisco (summer 2008), which will be chaired by **Lisa Kelly** and **Steve Ulrich**. But before you plan your 2008 trip to San Francisco, please think about attending the European Society for Photobiology in Bath, England (Sept 1-6, 2007). **Francesco Lenci** and **Rex Tyrrell** provide a preliminary program for this meeting near the end of this newsletter.

Another development by the ASP is the new web site on "Low Level Light Therapy" (LLLT; [www.pol-us.net/lllt](http://www.pol-us.net/lllt)) that is being developed by **Linda Jones** (ASP President-elect). Linda's goal is "to provide information on the interaction of light with biological tissues and to discuss the evidence of potential mechanisms". Since misinformation on LLLT is so widespread on the web, as well as on TV infomercials and elsewhere, this new site should be welcomed by scientists and the general public. Linda looks forward to your contributions to her LLLT site.

### ASP News

Published quarterly by the American Society for  
Photobiology

[www.photobiology.org](http://www.photobiology.org)

### Editor

Peter A. Ensminger, Ph.D.  
256 Greenwood Place  
Syracuse, NY 13210  
Tel: 315-478-6024

E-mail: [ensmingr@twcny.rr.com](mailto:ensmingr@twcny.rr.com)

### Layout

Tracy A. Newman  
E-mail: [tnewman@everestkc.net](mailto:tnewman@everestkc.net)

(Continued from page 2)

topic of global climate change. These included the “ASP/ESP Joint Symposium on Global Climate Change and Photobiology” (hosted by **Donat Häder** and **Richard Zepp**). In this joint symposium, **Terry V. Callaghan** (Director, Royal Swedish Academy of Sciences' Abisko Scientific Research Station) gave a particularly noteworthy lecture entitled “Impacts of changes in climate and UV-B radiation on Arctic terrestrial ecosystems”. The contributions to this symposium covered several major aspects of this topic from a photobiological point of view. New this year was an “Interdisciplinary Symposium in Photobiology” at which two of our long-term members, **Pill-Soon Song** and **John Sutherland** spoke. This Symposium was the brainchild of our Founding President, **Kendric Smith**. We anticipate that this symposium will be funded by a generous endowment from Dr. Smith at subsequent ASP meetings.

In addition to the participation of numerous South American photobiologists, we were happy to see excellent participation by Puerto Rican photochemists and photobiologists and their students. An important benefit of bringing the ASP meeting to a developing region is that we provide a real benefit to scientists who may not always be fortunate enough to have international scientific meetings so near to home.

The organizers would like to thank the Symposium Chairs, the Photostability Group who met with us in Puerto Rico, the sponsors and all the participants for their contributions toward the success of the meeting. Special thanks also to the local organizing committee of **Rafael Arce** and **Carlos Crespo**, who contributed greatly. On the social front we had an excellent ASP dinner with delightful entertainment by Puerto Rican dancers. **Linda Hardwick** and her team from Allen Marketing and Management did an excellent job of managing logistics on all fronts.

Lastly, while most recent ASP meetings have incurred debts for the society, we are happy to report that the Puerto Rico meeting required no subsidy from the ASP. Our thanks to treasurer **John Streicher** and again to **Linda Hardwick** for continued attention to budgetary details. We hope this marks a turn around and that our meeting in San Francisco (2008) will do even better. Your participation will truly help!

**Thomas A. Moore, Frances Noonan**  
Scientific Program Chairs,  
33<sup>rd</sup> ASP Meeting

## Changes for *Photochem Photobiol* Letter from the Publisher

As many of you may know, earlier this year ASP entered into a partnership with Blackwell Publishing to publish *Photochemistry and Photobiology*. We are delighted to be working with the ASP. The first issue published by Blackwell will be the January/February 2007 issue.

**John Simon** has kindly extended me the opportunity to highlight what the partnership between ASP and Blackwell will mean for ASP members. We pride ourselves on our commitment to societies in all disciplines, and have extended some standard benefits to members of societies publishing with Blackwell. Your membership in the ASP will provide access to *Photochemistry and Photobiology* through our online platform, **Synergy**, where you can sign up for “Electronic Table of Contents” alerts. *Synergy* also offers “Reference Manager” to help you download article citations directly into your reference management software and “Research Alerts” so you can keep up-to-date with articles that match your research interests.

**Synergy, Online Blackwell Platform**  
[www.blackwell-synergy.com](http://www.blackwell-synergy.com)

We also welcome you to read highlighted articles and news from relevant Blackwell titles on our content **Supersites** in a wide range of fields including plant science, molecular and cell biology, and dermatology. The content revolves, and will spotlight journal content from *Photochemistry and Photobiology* when appropriate.

**Blackwell Supersites**  
**Plant Science**  
[www.blackwellpublishing.com/PlantSci](http://www.blackwellpublishing.com/PlantSci)  
**Molecular and Cell Biology**  
[www.blackwellpublishing.com/MolCellBiol](http://www.blackwellpublishing.com/MolCellBiol)  
**Dermatology**  
[www.blackwellpublishing.com/Dermatology](http://www.blackwellpublishing.com/Dermatology)

There is exciting news for the future specific to the *Photochemistry and Photobiology* as well. As your publishing partner, we will develop a comprehensive marketing plan to raise the profile of the journal and the ASP. Our planned initiative include displays at major conferences in related fields, postcards promoting the journal's move to Blackwell, online readership and submissions, and outreach to media outlets through article-level public relations efforts.

(Continued on page 4)

(Continued from page 3)

We have also been working with the editorial office to ensure a smooth transition for the submission and publication of manuscripts. The move to **ManuscriptCentral** will make it easier to submit papers to *Photochem Photobiol*, and the site will be fully live and operational in 2007. Articles will also appear online ahead of print, and these "Online Early Articles" are fully citable the moment they are released.

**Blackwell Manuscript Central**  
Site for submitting manuscripts to *Photochem Photobiol*

<http://mc.manuscriptcentral.com/php>

We at Blackwell look forward to a long and rewarding partnership with the ASP!

### Selene Steneck

Associate Editor, Journals  
[ssteneck@bos.blackwellpublishing.com](mailto:ssteneck@bos.blackwellpublishing.com)

## New ASP Listserv

To ensure better communication with the members of ASP, and with the approval of Council, I set up the ASP Listserv at Stanford University. All members were put on the listserv. Unfortunately, we have incorrect e-mail addresses for 38 people, and many members have not even given the Business Office their e-mail addresses, so there are a lot of people out of the loop for communications. So, if you have not been receiving messages from the listserv, please send your correct e-mail address to [lhardwick@allenpress.com](mailto:lhardwick@allenpress.com) and to [kendric@stanford.edu](mailto:kendric@stanford.edu). Once you are on the listserv, and obtain your password, you can view the official archives (see below).

### Submit comments to ASP listserv

[amsocphoto-list@mailman.stanford.edu](mailto:amsocphoto-list@mailman.stanford.edu)

### To unsubscribe from the listserv, e-mail your request to

[kendric@stanford.edu](mailto:kendric@stanford.edu)

### To change your e-mail address, send changes to

[kendric@stanford.edu](mailto:kendric@stanford.edu) AND  
[lhardwick@allenpress.com](mailto:lhardwick@allenpress.com)

In the few weeks that the listserv has been active, many new ideas (and old ideas) have been proposed for improving ASP. One concern is that the people in Divisions 2 (Photosensory and Circadian Biology) and

3 (Photosynthesis, Bio- and Chemiluminescence) feel left out, both from the point of Council representation, and at the meetings which have few symposia in these areas. Another concern is that there are too many simultaneous symposia at our meetings and this prevents interdisciplinary interactions.

Another great benefit of the listserv is that shortly after a call for nominations for ASP Council was posted, several nominations have been received.

Regrettably, 13 people have asked to be removed from the list. I guess that they were afraid that they would be inundated in e-mail. We are sorry not to have the benefit of their input.

### View ASP Listserv Archives

To view the "Archives" of "amsocphoto-list", you need a password.

Non-Stanford members of the list should do this:

1. Go to <https://mailman.stanford.edu/mailman/listinfo/amsocphoto-list>
2. Scroll to bottom of the page and enter your email in the "Address" box
3. Click the button that says "Unsubscribe or edit options" to go to a new page
4. On the new page, enter your e-mail at the top of the page.

Then scroll to the bottom and click on the "Remind" button.

A password will be e-mailed to you.

Once you have a password, go to:

<https://mailman.stanford.edu/mailman/private/amsocphoto-list/>

Enter your email and password to view the archives

### Kendric C. Smith

Founding President of ASP



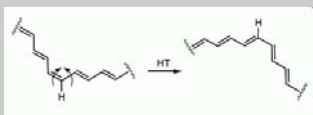


# Glossary of Photochemistry Terms

The journal *Pure and Applied Chemistry* will soon publish the third edition of "Glossary of Terms Used in Photochemistry", authored by ASP member **Silvia Braslavsky** (Max-Planck-Institut für Bioanorganische Chemie, Mülheim). This is an update to the second edition, published in 1996, and results from the collaboration of many colleagues. We hope to soon post a complete pdf version of this manuscript on the ASP web site.

## Sample from "Glossary of Terms Used in Photochemistry" ...

**hula-twist (HT) mechanism** - volume-conserving mechanism of photoisomerization of a double bond in a conjugated system involving simultaneous configurational and conformational isomerization, e.g., the photoinitiated concerted rotation of two adjacent double and single bonds.



Note: Under unconstrained conditions, the conventional one-bond-flip (OBF) process is the dominant process with the hula-twist (HT) being an undetectable higher energy process. It has been proposed that under confined conditions (e.g., a conjugated double bond chromophore in a protein cavity or in a solid matrix), the additional viscosity-dependent barriers makes the OBF a less favourable process, allowing the volume-conserving HT to be the dominant process for photoisomerization.

-PAE

## Encyclopedia of Earth Invitation for Contributions



I invite you to help build what is fast becoming a seminal reference on understanding and managing the environment. With the recent public release of the **Encyclopedia of Earth** ([www.eoearth.org](http://www.eoearth.org)), scientists from around the world are joining to create a comprehensive, authoritative source of information

about the environments of earth and their interactions with society. The **Encyclopedia of Earth** is written and governed by experts working in a unique collaborative environment, and it has been released through the initial work of about 300 authors and 100 topic editors.

The oversight committee includes an outstanding group of international scholars, our International Advisory Board. This board includes **Robert W. Corell**, Chair of the Steering Committee for the Arctic Climate Impact Assessment and keynote speaker at the recent ASP Meeting in Puerto Rico, and **F. Sherwood Rowland**, Professor at the University of California, Irvine and Nobel Laureate in Chemistry.

You can write or edit on any topic that interests you and that falls within the scope of the Encyclopedia. Entries are from 250 to 5,000 words and geared toward a general audience. Your articles can be drawn directly from existing materials you have written, subject to any copyright restrictions. The Encyclopedia is built, maintained, and governed by experts like you via a specially adapted "wiki," an online resource that allows users to add and edit content collectively. Significantly, unlike other wikis, access to the Encyclopedia wiki is restricted to approved experts, and all content is peer reviewed and approved prior to being published at the free public site.

Contributing is easy: visit [www.eoearth.org](http://www.eoearth.org), click on "Contribute" on the top right, and follow the instructions. The site also contains additional information about the project. I encourage you to circulate this invitation widely within your community.

Please contact me or my editorial assistants, **Alejandra Roman** <[aoe@earthportal.net](mailto:aoe@earthportal.net)> or **Ida Kubiszewski** <[ida.kub@gmail.com](mailto:ida.kub@gmail.com)>, with questions. Thanks for your consideration.

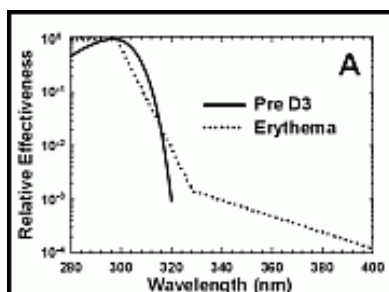
**Cutler J. Cleveland**  
[cutler@bu.edu](mailto:cutler@bu.edu)

## ASP Homepage Usage Statistics

**Counter Dates:** Sept 24 to Dec 19, '06 (87 days)  
**Total page views:** 3189 (avg of 36.7 per day)  
Avg of 45.3 on each weekday  
Avg of 16.4 on each weekend day  
**Total unique visits:** 2399 (avg of 27.6 per day)  
Avg of 34.1 on each weekday  
Avg of 12.3 on each weekend day

# Research by ASP Members

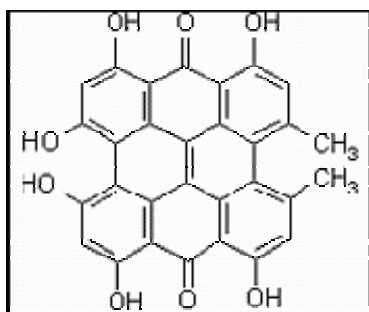
## Vitamin D and Sunlight



Action spectrum for previtamin D3 synthesis (solid line) and sunburn (dotted line).

People are often urged to apply high-SPF sunscreen as protection against skin cancer and other ultraviolet-mediated damage to the skin. However, the ultraviolet component of sunlight also promotes the formation of previtamin D3 (which spontaneously isomerizes to vitamin D3). Vitamin D3 is important for maintenance of normal physiological function and its deficiency leads to several diseases, including Rickets, osteoporosis, and osteomalacia. In a forthcoming issue of *Photochemistry and Photobiology*, **Robert Sayre** and **John Dowdy** (Rapid Precision Testing Laboratories, Cordova, TN) show that normal application of SPF-15 sunscreen greatly inhibits synthesis of previtamin D3 (Darkness at Noon: Sunscreen and Vitamin D3, *Photochem Photobiol* doi: 10.1562/2006-06-29-RC-956).

## Phototoxic Effect of St. John's Wort



Hypericin, an anthraquinone derivative, is a red pigment present in St. John's wort.

St. John's wort (*Hypericum perforatum*) is an herb whose extract has been advocated as a treatment for mild to moderate depression. However, this herb contains hypericin, a compound that is phototoxic to the skin and to cells in the lens of the eye. In a forthcoming issue of *Photochemistry and Photobiology*, ASP members **Albert Wielgus**, **Colin Chignell**, **Joan Roberts**, and colleagues report on their studies of the phototoxicity of hypericin to cells in the human retina (Phototoxicity in Human Retinal Pigment Epithelial Cells Promoted by Hypericin, a Component of St. John's Wort, *Photochem Photobiol* doi: 10.1562/2006-08-09-RA-1001). They show that retinal pigment epithelial cells readily take up hypericin and that subsequent exposure to visible light

causes cell death. Controls (given hypericin alone or light alone) were unaffected. The authors conclude that St. John's wort is potentially phototoxic to the human retina and may contribute to ocular pathologies.

(reprinted with modification from the ASP web site)

## 2007 ESP Congress

Location: Bath England

Date: Sept 1-6, 2007

Web site: [www.esp-photobiology.it/2007congress](http://www.esp-photobiology.it/2007congress)



Bath England, site of the 2007 ESP Congress

## Plenary Lectures - Photobiology Updates

- Janet F. Bornman (New Zealand): Title to be announced
- Steve Bown (UK): Overview of clinical applications of PDT
- Leon H. F. Mullenders (The Netherlands): Title to be announced
- Vivienne Reeve (Australia): Multiple regulatory pathways for photoimmune responsiveness
- Pill-Soon Song (Korea): From photochemistry and photobiology to photobiotechnology of plants
- Young Investigator Lecture: Speaker to be appointed, Title to be announced

## Symposia

- ALA-based PDT  
Chair: Allan Oseroff (USA)
- A reconstruction of the past UV climatology over Europe for photobiological studies (ESP-COST-726 Joint Symposium)  
Chair: Gaetano Zipoli (Italy)
- Biological consequences of UV damage  
Chair: Alain Sarasin (France)
- Bioluminescence  
Chair: Vadim Viviani (Brasil)
- Biophysics of Photosensitization

(Continued from page 6)

- Chair: Benjamin Ehrenberg (Israel)
- Blue light regulation in plants and microorganisms  
Chair: Aba Losi (Italy)
- Clinical applications of PDT  
Chair: Herwig Kostron (Austria)
- DNA damage and repair  
Chair: Jean Cadet (France)
- Drug delivery technologies for PDT  
Chair: Kristian Berg (Norway)
- Experimental photocarcinogenesis  
Chair: Honnavara Ananthaswamy (USA)
- Instrumentation in photobiology  
Chair: Angelika Rueck (Germany)
- Molecular and cellular aspects of PDT  
Chair: Jacques Piette (Belgium)
- Molecular and cellular effects of UV-A  
Chair: Rex Tyrrell (UK)
- New approaches to clinical phototherapy  
Chair: Peter Wolf (Austria)
- New aspects of photoimmunology - mouse and man  
Chair: Vivienne Reeve (Australia)
- PDT, light and immune system  
Chair: Gianfranco Canti (Italy)
- PDT to treat microbial infections - Advances in understanding the mechanisms involved in the photosensitised inactivation of microbial cells (In memory of John Spikes)  
Chair: Giulio Jori (Italy)
- Photobiological techniques for environmental monitoring and control  
Chair: Francesco Ghetti (Italy)
- Photochemistry and photobiology of carotenoids (ESP-EPA Joint Symposium)  
Chairs: Johan Lugtenburg (The Netherlands), George Truscott (UK)
- Photochemistry and phototoxicity of drugs  
Chair: Miguel Miranda (Spain)
- Photodermatoses (ESP-BPG Joint Symposium in memory of Ian Magnus)  
Chairs: Neil Gibbs (UK), Antony Young (UK)
- Photodiagnosis and optical techniques for medical diagnosis  
Chair: Georges Wagnières (Switzerland)
- Photoorientation in plants and microorganisms  
Chair: Francesco Lenci (Italy)
- Photoprotection (ESP-ESPD Joint Symposium)  
Chairs: Christophe Bedane (France), Piergiacomo Calzavara-Pinton (Italy)
- Photosynthesis: mimicking the natural system for

solar energy conversion (In honour of James Barber)

Chair: Alison Telfer (UK)

- Plant photobiology (Title to be announced)  
Chair: Janet F. Bornman (New Zealand)
- Recent advances in the characterization of photooxidative damage at the biomolecular level  
Chair: Al Girotti (USA), Colin Chignell (USA)
- Sun sensitivity, DNA repair and skin cancer  
Chair: Ken Kraemer (USA)
- UV and global climate change: effects in aquatic and terrestrial ecosystems (ESP-ASP Joint Symposium)  
Chairs: Donat-Peter Haeder (Germany), Pat Neale (USA)
- UV and oxidative stress  
Chair: Irene Kochever (USA)
- Vitamin D and solar radiation  
Chair: Antony Young (UK)

### Francesco Lenci, Rex Tyrrell



*The Roman baths of Bath, England, site of the 2007 ESP Congress.*



*The Pulteney Bridge of Bath, England.*



## Upcoming Events

### January 7-12, 2007

*Gordon Research Conference on Carotenoids*

Ventura Beach Marriott,  
Ventura, CA

Web site: [www.grc.org/programs.aspx?year=2007&program=carot](http://www.grc.org/programs.aspx?year=2007&program=carot)

### January 17-19

*Fourth Annual Advanced Optical Methods Workshop*

Berkeley, CA

Web site: [imaging.berkeley.edu/optical\\_methods\\_07workshop.html](http://imaging.berkeley.edu/optical_methods_07workshop.html)

### January 20-25, 2007

*SPIE International Symposium on Biomedical Optics 2007*

San Jose Convention Center, San Jose, CA, USA

Web site: [spie.org/Conferences/calls/07/pw/](http://spie.org/Conferences/calls/07/pw/)

### February 8-11, 2007

*PhotoRadChem-200: An International Conference on Frontiers of Radiation and Photochemistry*

Mahatma Gandhi University  
Kottayam,

Kerala, India

Web site: [photoradchem.org/prc2007/](http://photoradchem.org/prc2007/)

E-mail: Dr. C.T. Aravindakumar,  
[photoradchem07@gmail.com](mailto:photoradchem07@gmail.com)

### March 3-7, 2007

*2007 Biophysical Society Annual Meeting*

Baltimore, MD

Web site: [www.biophysics.org](http://www.biophysics.org)

### March 28-31, 2007

*11th World Congress of the International Photodynamic Association*

Shanghai, China

Website: [www.ipa2007-shanghai.com](http://www.ipa2007-shanghai.com)

E-mail: [lasercenter@163.com](mailto:lasercenter@163.com)

### May 3-4, 2007

*Journées Francophones de Photochimie, Photocatalyse et Catalyse Environnementale*

Saint-Avold, France

E-mail: Dr Didier,  
[drobert@iut.univ-metz.fr](mailto:drobert@iut.univ-metz.fr)

### May 6-11, 2007

*CLEO/QELS 2007*

Baltimore, MD

Web site:  
[www.cleoconference.org](http://www.cleoconference.org)

### June 9-16, 2007

*Graduate summer school: Biophotonics '07*

The Island of Ven

Backafallsbyn, Sweden.

Web site: [www.biop.dk/biophotonics07/](http://www.biop.dk/biophotonics07/)

### June 17 - 22, 2007

*World of Photonics Congress*  
International Congress Center,  
Munich, Germany

### July 7-11, 2007

*Plant Biology 2007*

American Society for Plant Biology  
Chicago, IL

### Jul 8-13, 2007

*Gordon Research Conference Photochemistry*

Bryant University

Website:  
[www.grc.org/07sched.htm](http://www.grc.org/07sched.htm)

### July 23-27, 2007

*Photosynthesis 2007*

Society for Experimental Biology  
Glasgow, Scotland

Web site: [www.sebiology.org/Meetings/pageview.asp?S=2&mid=84](http://www.sebiology.org/Meetings/pageview.asp?S=2&mid=84)

### July 29-Aug 3, 2007

*XXIII International Conference*

*on Photochemistry*

Cologne, Germany

Web site: [www.icp2007.net/](http://www.icp2007.net/)

### September 1-6, 2007

*12<sup>th</sup> ESP Congress*

Bath, United Kingdom

Web site: [www.esp-photobiology.it/congresses/conference2007.html](http://www.esp-photobiology.it/congresses/conference2007.html)

### September 1-6, 2007

*12th European Conference on Spectroscopy of Biological Molecules*

Bobigny (Paris region), France

Web site: [www.ecsbm.eu/](http://www.ecsbm.eu/)

E-mail: Dr. Mahmoud Ghomi  
[ecsbm\\_07@smbh.univ-paris13.fr](mailto:ecsbm_07@smbh.univ-paris13.fr)

### Feb 2-6, 2008

*16th IUPAB Congress*

Long Beach, California, USA

### June 18-23, 2009

*15th International Congress on Photobiology*

Duesseldorf, Germany.

### Upcoming Events for Plant Biologists, 2007-08

*American Society for Plant Biology*

Web site: <http://aspb.org/calendar/listall.cfm>

### Upcoming Events for Chemists, 2007-2008

*American Chemical Society*

Web site: [www.chemistry.org/portal/a/c/s/1/acsdisplay.html?DOC=meetings\index.html](http://www.chemistry.org/portal/a/c/s/1/acsdisplay.html?DOC=meetings\index.html)



*The Royal Crescent of Bath, England, site of the 2007 ESP Congress.*



# American Society for Photobiology



*Lux et Vita* since 1972

The American Society for Photobiology promotes research in photobiology, integration of different photobiology disciplines, dissemination of photobiology knowledge, and provides information on photobiological aspects of national and international issues.

---

Thank you for your interest in joining the **American Society for Photobiology**. Please print this page, fill out the form, and send it with payment to:

**American Society for Photobiology**  
**PO Box 1897**  
**Lawrence KS 66044-8897**

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Organization: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_

Zip/Postal Code: \_\_\_\_\_

Country: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

## Membership type:

\$45/yr Associate Member (student/post-doc; online access to *Photochem Photobiol*)

\$120/yr Member (online access to *Photochem Photobiol*)

\$228/2-yrs Member (online access to *Photochem Photobiol*)

\$140/yr Member (printed version and online access to *Photochem Photobiol*)

\$266/2-yrs Member (printed version and online access to *Photochem Photobiol*)

\$60/yr Emeritus (printed version and online access to *Photochem Photobiol*)

\$10/yr Emeritus (online access to *Photochem Photobiol*)

## Payment Type:

Check

Master Card

Visa

AMEX

Credit Card Number \_\_\_\_\_

Credit Card Expiration Date \_\_\_\_\_

Signature \_\_\_\_\_