

# **Candidates for President Elect**



Thomas G. Ebrey

Department of Biology, University of Washington, Seattle, WA. ASP Division 2 (Photosensory and Circadian Biology) and Division 3 (Photosynthesis)

**Education:** B.S. Physics, University of Oklahoma, Ph.D. Physics, University of Chicago, Postdoctoral work with Rod Clayton at Cornell University.

Appointments: Assistant Professor, Department of Biological Sciences, Columbia University, 1968-73; Associate Professor to Full, Departments of Physiology and Biophysics, and Department of Cell and Structural Biology, University of Illinois, 1973 2000; Research Professor, Department of Biology, University of Washington, 2000present; Visiting appointments, Kyoto University, Kyoto Japan, 1971; Institute of Biophysics, Academy of Sciences, Beijing, China, 1980; Department of Biology, Princeton University, 1982.

**Research Interests:** Phototransduction involving retinal pigments. Spectroscopy and photochemistry of visual pigments, bacteriorhodopsin. Structure and organization of Frances P. Noonan

The George Washington University Medical Center, Washington, D.C. ASP Division 4 (Photomedicine) and Division 5 (Environmental and UVR Effects)



**Education:** B.Sc. (Hons. Biochemistry) and Ph.D. (Microbiology/Immunology), University of Queensland, Australia. Post-doctoral (Photoimmunology/tumor immunology), NCI Frederick Cancer Research Facility, Frederick, MD.

**Appointments:** Research Officer, Department of Microbiology, University of Queensland, 1977-78; Scientist, Cancer Biology Program, Frederick Cancer Research Center, 1978-82; Visiting Scientist, 1<sup>st</sup> Department of Dermatology, University of Vienna, 1982; B.S. Hanson Research Fellow/Research Fellow of the Anti-Cancer Foundation of the Universities of South Australia, 1983-86; Associate Research Professor, George Washington University, 1986-92; Expert, Biologic Resources Branch, Biologic Response Modifiers Program, National Cancer Institute, 1987 (Feb to Aug); Research Professor, George Washington University, 1992-2001; Professor, George Washington University, 2001-present.

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light energy transducing membranes using low temperature and flash spectroscopy, and FTIR spectroscopy. Earlier work on chlorophyll-based bacterial photosynthesis and on phototropism in fungi.

**ASP Service:** Organized symposia at National and International meetings of the Society; served as Associate Editor for *Photochemistry and Photobiology*.

Candidate's Statement: In my view our greatest challenge is to maintain the vigor and intensity of our enterprise. In many ways these are golden days for photobiology. On the one hand the number of new photoreceptors being found in organisms is expanding at a breathtaking pace due mostly due to new techniques, many of which were pioneered by our members. On the other hand, photomedicine has expanded both by important new findings and with the publication of new textbooks and other educational resources making it much easier to teach and proselytize in this area. Not only are the fundamental scientific background and principles of photobiology shared by all our members, but there is important cross fertilization that takes place when we learn about the latest findings in related subdisciplines. The creation of an on-line textbook of "all of biophysics" by the Biophysical Society should allow our members to more easily put together mini-courses on photobiological topics. A similar but more restricted initiative has been started by our European counter parts. I would support these on-line educational resources and try to ensure that all topics of interest to members of ASP are

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### Frances P. Noonan

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**Research Interests:** The role of ultraviolet radiation in skin cancer is the focus of my research interests. My area of expertise is photoimmunology and photobiology, in particular the immunologic consequences of exposure to ultraviolet B (UVB, 290-320nm) radiation and their role in skin cancer outgrowth. Our group has been involved with photoimmunology almost since its inception and was responsible for the first evidence that photoisomerization of urocanic acid in the skin is immunosuppressive. More recently, we have developed a mouse model for cutaneous UVinduced melanoma that recapitulates human disease in etiology, histopathology and molecular pathogenesis. The long-term aims of my laboratory are two-fold: first, to identify the genes controlling susceptibility to UV-induced immunosuppression and to establish how these contribute to skin cancer development; second, to use the melanoma mouse model to derive a better understanding of malignant melanoma, particularly the photobiology of this disease and the role of the immune system in its pathogenesis.

**ASP Service:** Councilor 1993-96 and 2000-2003. Symposium organizer (ASP annual meetings and ICP meetings, Vienna, 1996 and San Francisco, 2000).

**Candidate's Statement:** The strength of the ASP is not only in the expertise of its members in research and teaching but also in its interdisciplinary structure embodied in its 5 divisions. We need to maintain the strength of each division and strongly encourage participation in the ASP of scientists in new

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covered by them. I would also like the Society to encourage such efforts by other societies. We should consider putting together syllabi of model courses in photobiology, phototransduction, photomedicine, etc. that would help all scientists teaching on these topics. Such efforts would also help ensure that students and younger developing scientists are exposed to photobiology.

The annual meeting is at the core of much that the Society does and due to the efforts of our members who have organized these, they have been quite successful. But the meeting is not a "must" for all areas of photobiology because of a lack of a critical mass of researchers in some sub-disciplines of photobiology. While I know how is difficult it is to change patterns of meeting attendance, I would like to work with the Council and the Society's members to slowly expand areas of photobiology that are under-represented at our national meeting, while solidifying those areas that are well represented.

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areas which interact with photobiology. The ASP needs to maintain and to improve its role in providing opportunities for students and junior faculty to participate in society scientific meetings and in governance. If elected President, I will do my utmost to continue to encourage and develop interest in the fascinating effects of light on chemical and biological systems.



# **Candidates for Councilor**

### Thomas C. Vogelmann

Division 3 (Photosynthesis and Photoconversion) Botany and Agricultural Biochemistry University of Vermont Burlington, Vermont

**Education:** B.S., Biological Sciences, University of Vermont, 1974; M.S., Botany, Washington State University, 1977; Ph.D., Biology Syracuse University, 1980; NSF Postdoctoral Fellow, Institute of Plant Physiology, University of Lund (Sweden), 1981-84; Docent, University of Lund, 1984.

**Appointments:** Professor and Chair, Botany and Agricultural Biochemistry, University of Vermont, 2001-present; Visiting Research Fellow, Research School of Biological Sciences, Australian National University, 2000; Visiting Research Scientist, University of Lund (Sweden), 1990-91; Assistant to Full Professor, Botany, University of Wyoming, 1984-2001.

Awards: Robertson Lecture, Australian and New Zealand Societies for Plant Physiology 2000; Finsen young investigators award, ASP 1984.

**Research Interests:** Plant photobiology including optical properties of leaves and photosynthetic tissues; instrumentation development for studying leaf optics and photosynthesis; photoacoustics; plant adaptations to their light environment. Current work involves measurement of photon transit times in leaves, photoprotection in snow algae, and absorption profiles in leaves related to tissue anatomy and chloroplast movement. ASP Service: Member since 1998.

Candidate's Statement: I served on the ASP Council last year as a temporary one-year replacement for an open counselor position. Having learned the inner workings of the ASP, I would like to be given the opportunity to serve as Counselor with a regular full-term appointment so that I can help develop and promote the mission of ASP. My goals as a Counselor would be to work with the Board of Directors to expand the membership of ASP by recruiting young scientists from underrepresented fields of plant photobiology and photosynthesis. I would take advantage of the unique multidisciplinary membership of ASP by promoting and sponsoring interdisciplinary symposia at ASP annual meetings and I would work to increase the presence of plant photobiology at these meetings. I would actively solicit the submission of high-quality manuscripts from plant-oriented research labs to Photochemistry and Photobiology, and I would support and contribute to the ongoing educational activities of the society. Finally, many new ideas and opportunities arise through interaction with colleagues overseas and I would work to facilitate international activities. By pursuing this agenda, I hope to help increase the visibility of ASP and photobiology.

#### Kevin D. Ridge

Division 2 (Photosensory Biology) Research Chemist National Institute of Standards and Technology Gaithersburg, MD Adjunct Associate Professor University of Maryland Biotechnology Institute Rockville, MD

### Kevin D. Ridge

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**Education:** BS, Biology, Grove City College, Grove City, PA, 1979-1983; Ph.D., Biochemistry, Protein Research Laboratory, Department of Biochemistry, University of Pittsburgh, School of Medicine, Pittsburgh, PA, 1984-1989

Appointments: Research Chemist (Career appointment), National Institute of Standards and Technology, 12/97 – present; Acting Supervisory Research Chemist (Group Leader), National Institute of Standards and Technology, 6/99 – 9/99; Research Biologist (Term appointment), National Institute of Standards and Technology, 12/93 - 12/97; Adjunct Associate Professor (Tenured appointment), University of Maryland Biotechnology Institute, 11/99 – present; Adjunct Assistant Professor (Tenure-track appointment), University of Maryland Biotechnology Institute, 12/93 – 11/99; Postdoctoral Fellow, Massachusetts Institute of Technology, 11/89 – 11/93.

Awards: National Research Service Award, NIH (6/90 - 5/93); Awards from the Karl Kirchgessner Foundation, Excellence in Vision Research (7/98 and 7/00)

**Research Interests:** The research in my laboratory is primarily focused on the dynamic aspects of integral membrane protein structure. Particular emphasis is given to members of the superfamily of G-protein coupled receptors (GPCR's) sharing the seven-transmembrane-helix structural motif. Specifically, novel biochemical and biophysical approaches are being employed to study the mechanism(s) of folding, assembly, and function for the visual photoreceptor rhodopsin and the HIV-1 coreceptor CCR5. A clear understanding of how rhodopsin and CCR5 adopt their tertiary structures should provide key insights into the molecular details of signal transduction as well as the consequences associated with many naturally occurring mutations that lead to receptor dysfunction. Structural approaches are also being employed in order to better understand the molecular mechanisms underlying GPCR ligand binding and signaling.

A second research area is focused on the development and application of high-throughput ligand screening approaches for GPCR's. The main emphasis of these studies is to use cell membrane hybrid bilayers containing "orphan" GPCR's in combination with surface plasmon resonance technology to rapidly identify and validate ligands of potential interaction.

ASP Service: Member since December, 2002

**Candidate's Statement:** As a relatively new member of ASP myself, I would like to see greater participation and membership among young investigators and a concerted effort by the ASP Officers to build stronger ties between basic research and clinical scientist members. When one considers the research focus of the broad ASP membership, as well as many of the recent discoveries in photobiology and the common future challenges that lie ahead, this seems to be a logical necessity. In my own field, vision research, such efforts have proved to be quite rewarding.

#### David H. Thompson

Division 4 (Photomedicine) Department of Chemistry, Purdue University, 560 Oval Drive, West Lafayette, IN.

### David H. Thompson

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**Education:** B.S., 1978, Chemistry, University of Missouri, Columbia; B.A., 1978, Biology, University of Missouri, Columbia; Ph.D., 1984, Organic Chemistry, Colorado State University; Postdoctoral Associate, 1984-86, Oregon Graduate Institute.

Appointments: Assistant Professor, 1987-1994, Oregon Graduate Institute; Visiting Professor, 1992, University of British Columbia-Biochemistry; Associate Professor, 1994-2001, Purdue University; Professor, 2001present, Purdue University; Visiting Professor, 2003, University of Florida-Pharmaceutics.

**Research Interests:** Design and development of synthetic, light-actuated systems capable of promoting 1) delivery of water-soluble materials—including photosensitizers—to the cytoplasm of target cells, 2) vectorial charge separation across vesicle membranes, and 3) light-triggered formation of protein hydrogels; mechanistic studies of sensitized photooxidation of plasmenylcholines; integral membrane protein-based supported membrane sensors.

**ASP Service:** Member since 1991; Symposium speaker, poster presenter, and regular attendee at Annual Meetings; reviewer for *Photochemistry and Photobiology*.

**Candidate's Statement:** ASP is a remarkably diverse and open scientific organization. These are rare qualities and an asset that should be vigorously maintained. As Councilor, I would seek to boost the participation of students and postdoctoral associates from diverse research areas at the Annual Meeting, engage in fund raising efforts to support travel and "best presentation" awards for budding young photochemists and photobiologists, and promote the development of symposia in emerging areas of research while maintaining the high standards of our society.

### Stephen E. Ullrich

Division 4 (Photomedicine) Professor Department of Immunology University of Texas, M.D. Anderson Cancer Center

**Education**: Ph.D. 1979, Microbiology, Georgetown University Medical Center, Washington, DC; B.S. 1975, Biology, St Bonaventure University, Olean NY

**Appointments**: Scientist I, Immunobiology of Physical and Chemical Carcinogenesis Laboratory, NCI-Frederick Cancer Research Facility, Frederick, Maryland, 1982-1983; Research Associate, Dept. of Immunology, MD Anderson Cancer Center 1983-1985; Assistant Immunologist, Dept. of Immunology, MD Anderson Cancer Center 1985-1987; Assistant Professor, Dept. of Immunology, MD Anderson Cancer Center 1987-1993; Associate Professor, Dept. of Immunology, MD Anderson Cancer Center, 1993-1999; Professor, Dept. of Immunology, MD Anderson Cancer Center, 1999-present; Member of the Graduate Faculty, The Graduate School of Biomedical Sciences, The University of Texas Health Science Center, Houston, Texas, 1987-present.

**Research Interests**: Photoimmunology, Environmental Immunotoxicology; Carcinogenesis.

**ASP Service**: Member since 1994; regular attendee and speaker at annual

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meetings; Organized and/or chaired 6 Immunology symposiums at annual meetings. Regular reviewer for Photochemistry and Photobiology.

Candidate 's Statement: Get two or more scientists together over a beer at the annual meeting and invariably the topic of funding comes up. The doubling of the NIH research budget and the efforts to double the NSF budget, have helped relieve some of the stress. But doubling the NIH budget did not occur solely through the grace of God". Intense lobbying efforts by organizations such as the Federation of American Societies for Experimental Biology (FASEB) and the American Association for Cancer Research helped. Of all the societies of which I am a member, I find that the ASP is the most collegial, in part due to its small size. But the size of the ASP can be a double-edged sword. The disappearance of the federal budget surplus, coupled with the growing budget deficient suggests hard times are ahead in regard to research funding. I am concerned that voice of the photobiological community may not be heard in the upcoming debate about research funding. I believe that it is time to seriously consider allying ourselves with a larger organization like FASEB. We can keep the collegial atmosphere of the ASP intact, but at the same time greatly increase our lobbying power and visibility.

### **Rosalie Kelsey Crouch**

Division 2 (Photosensory Biology) Departments of Ophthalmology and Biochemistry Medical University of South Carolina, Charleston SC **Education**: A.B., Chemistry, Randolph-Macon Women's College; M.S., Organic Chemistry, Lehigh University; Ph.D. 1972 Organic Chemistry, Yeshiva University; Post-doctoral research 1972-1975, Bio-organic Chemistry, Photosensitive Pigments, Columbia University.

**Appointments:** Assistant Professor of Ophthalmology and Biochemistry, Medical University of SC, 1975, Associate Professor, 1978, Professor, 1982-present; Dean, College of Graduate Studies, 1989-1999; Associate Provost for Research, 1995-1999; Provost and Vice President for Academic Affairs, 1999-2002.

**Research Interests:** The structure and function of the photosensitive pigments of the visual system, with particular emphasis on the control of both the absorption properties and activity of these proteins by retinoids; transport and metabolism of retinoids in ocular tissues; factors affecting cataract formation; ocular light damage.

ASP Service: Member since 1981; Co-Chaired symposia at the 12<sup>th</sup> International Congress of Photobiology, Vienna, and 13<sup>th</sup> Congress in San Francisco, CA, invited chair for the 14<sup>th</sup> Congress in Jeju, Korea; served on the ASP education committee 1997-2000; co-chaired and /or presented at education workshops 1998 and 1999; organized workshop on mass spectrometry, annual meeting 1996; special invited lecturer, annual meeting, 1996; presentor and /or session chair at the majority of annual meetings 1881 to present; Associate Editor 1994-1999 and Editorial Advisory Board, 2000-present, Journal of Photochemistry and Photobiology; APS Council member 1996-2000.

**Candidate's Statement:** ASP's special aspect is its multidisciplinary nature, both across the

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classical disciplines of basic science such as biochemistry, immunology, etc. to areas of interest from clinical disorders to the most basic of mechanistic questions. As councilor, my first goal would be to strive to ensure that this multidisciplinary aspect of the society is maintained and perhaps even broadened. Secondly, I would endeavor to make information about new developing techniques that could be of value to the members assessable as part of the annual meetings. Workshops are a particularly usual format for these presentations. Thirdly, the use of the web-based formats to share information and provide instructional materials is an area that I would emphasize and support. Finally, I have great interest in the educational aspect of our society. Educating the public is a duty of all scientists and one where the ASP needs to continue to place our efforts. And our future is with our young. There is perhaps no greater pleasure than catching the interest of a youngster and watching he/she grow up to make their own contributions to science. The ASP has an obligation to continue its work in this area and I am eager to contribute in this area.

### **Ronald L. Christensen**

Division 1 (Photochemistry, Photophysics, and Phototechnology) Department of Chemistry, Bowdoin College, Brunswick, Maine

**Education:** A.B., 1967, Oberlin College, Oberlin, Ohio; A.M., 1969; Ph.D., 1972, Harvard University; 1973-75, Post-Doctoral Fellow, University of Leiden, the Netherlands; 1975-76, Research Fellow in Chemistry, Wesleyan University, Middletown, Connecticut.

Appointments: 1976-82, Assistant Professor of Chemistry, Bowdoin College; 1980-82, Director, Bowdoin College Summer Course, Fluorescence Spectroscopy: Techniques and Applications; 1982-83, Visiting Professor, Royal Institution of Great Britain, London; 1982-88, Associate Professor of Chemistry, Bowdoin College; 1987-89, Chair, Department of Chemistry, Bowdoin College; 1988-Professor of Chemistry, Bowdoin College; 1989-90, Visiting Research Fellow in Department of Physical Chemistry, The University of Melbourne, Australia and Visiting Professor, Institute for Molecular Science, Okazaki, Japan; 1993-95, Chair, Department of Chemistry, Bowdoin College; 1998, Visiting Professor, Department of Chemistry, Imperial College, London; 1999- James Stacy Coles Professor of Natural Sciences, Bowdoin College; 2000-Associate Dean for Academic Affairs for the Sciences, Bowdoin College

**Research Interests:** Electronic spectroscopy of polyenes and carotenoids, energy transfer in photosynthesis, optical spectroscopy and photochemistry of photoreceptors, optical and electronic properties of conjugated polymers and other long polyenes.

**ASP Service:** member since 1980; reviewer of papers; speaker at ASP annual meetings.

**Candidate's Statement**: Photochemistry and photobiology both are at very exciting stages of their development and provide many examples of the value of interdisciplinary approaches to research. However, much of the excitement of these fields is confined to the pages of Photochemistry and Photobiology and the ASP Annual meetings. I would like to see ASP take a more vigorous role in building bridges (via its

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web site) to the educational community and in generating additional interest in these fields. ASP should serve a source of information for educators and the public on the many ways in which light affects chemical and biological systems. This not only would have a significant impact on the educations and aspirations of future science students but also would give the ASP more visibility as the source of expertise and information on a wide variety of scientific issues of public interest. As a council member, I will work toward strengthening these outreach aspects of the Society.

### **Gordon Tollin**

Division 1 (Photochemistry, Photophysics and Phototechnology) Department of Biochemistry and Molecular Biophysics University of Arizona Tucson, Arizona

Education: B.S., 1952, Brooklyn College, CUNY, Chemistry, Biology; Ph.D. 1956, Iowa State University, Biochemistry; Postdoctoral: 1956, Department of Chemistry, Florida State University and 1956-59, Lawrence Laboratory, University of California, Berkeley.

**Appointments:** NSF Postdoctoral Fellow, 1956-57; Alfred P. Sloan Foundation Fellow, 1962-66; 1959-present, Assistant, Associate, and Full Professor, Department of Biochemistry and Department of Chemistry, University of Arizona, Tucson; Regents Professor, 1996present.

**Research Interests:** Mechanisms of electron transfer, photochemical energy conversion, and

signal transduction in soluble and membranebound proteins.

**ASP Service:** Councilor, Photochemistry and Photobiology Group, Biophysical Society, 1970-72, Chairman, 1973; Charter member of ASP, 1972-present; Associate Editor, Photochemistry and Photobiology, 1971-73; frequent attendee and speaker at annual meetings.

**Candidate's Statement:** I will work to further the goals of the Society and particularly to increase the representation in ASP of scientists working in the areas of photochemistry, photophysics, and photosensory biology.

### Linda R. Jones

ASP Division 1 (Photochemistry, Photophysics and Phototechnology) Department of Physics and Astronomy, College of Charleston, Charleston SC

**Education:** B.S. in Physics and B.A. in Chemistry, 1989, College of Charleston; Ph.D. in Physics, 1994, Illinois Institute of Technology; Postdoctoral Fellow 1995-96 Medical College of Wisconsin, Department of Pediatrics Hematology/Oncology.

**Appointments:** Associate and Assistant Professor of Physics and Astronomy, College of Charleston, Charleston SC 1996-present.

**Research Interests:** Light dosimetry for photodynamic therapy; interactions of light with biological tissues; Innovations in undergraduate physics education.

**ASP Service:** Member since 1995. Served on the Education Committee, Mentoring Committee and served as Photophysics Editor of the Digital Photobiology Compendium.

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Candidate's Statement: I have two goals for my participation in the ASP council. First of all, I would like to promote the involvement of undergraduate students in the annual meetings. For example, I would like to organize a poster session early in the week especially for undergraduates where they may explain their research projects to senior members of the society. Undergraduate students who accompanied me to ASP meetings have enjoyed meeting faculty members from various graduate programs. They were also able to see how their own projects related to other current research. My second goal is to facilitate the inclusion of biomedical imaging at the annual meetings. I would suggest a dedicated symposium on biomedical imaging as well as an educational tutorial to explain the basics of the newest techniques.

### Wouter D. Hoff

Division 2 (Photosensory Biology) Assistant Professor The University of Chicago

Education: University of Amsterdam, B.S., Biology, with High Honors, 1991; University of Amsterdam, Ph.D., with High Honors, 1995; University of Texas, Damon-Runyon post-doctoral fellow, 1995-97; Oklahoma State University, Damon-Runyon post-doctoral fellow, 1997-1998.

**Appointments**: Assistant Professor, Department of Biochemistry and Molecular Biology, The University of Chicago, 1998-present.

**Research Interests:** Bacterial photoreceptors and their signal transduction chains; using

photoreceptors as model systems for signal transduction, protein function, and protein folding; biophysics of proteins; development of sensors with medical applications based on light-sensitive proteins.

#### ASP Service: None.

Candidate's Statement: As an undergraduate student at the University of Amsterdam I became interested in bacterial photoreceptors, and this has remained the focus throughout my work. After a PhD on photoactive yellow protein (PYP) from purple bacteria under the supervision of Klaas Hellingwerf at the University of Amsterdam, and post-doctoral work with John Spudich at the University of Texas and Aihua Xie at Oklahoma state University involving both PYP and the archaebacterial sensory rhodopsins, I started my own research group at the University of Chicago in 1998. In Chicago I continue to follow my long-standing interest in using photoreceptors as model systems to unravel protein function, signal transduction and protein folding. Photobiology is in a very exciting stage. First, a number of novel photosensory proteins have been discovered, and key results have recently been obtained for a number of bacterial phororeceptors. Secondly, using powerful techniques such as X-ray crystallography and FTIR spectroscopy, complemented by molecular genetics and genomics-based approaches, it is becoming increasingly feasible to aim for a deep understanding of signaling by bacterial photoreceptors at the molecular level. As a council member I will emphasize these exciting new developments in photobiology, and will aim to strengthen the efforts of the Society in these areas.

### Harry A. Frank

Division 3 (Photosynthesis and Photoconversion) Department of Chemistry, University of Connecticut, Storrs, CT

Education: B.S., 1973, Memphis State University; Ph.D., 1977, Boston University; Postdoctoral Fellow, 1977-80, Laboratory of Chemical Biodynamics, University of California, Berkeley, under the direction of Professor Kenneth Sauer.

**Appointments:** Assistant, Associate and Professor, Department of Chemistry, University of Connecticut, 1980 to present; Visiting Research Scientist, Centre d'Etudes Nucléaires de Saclay, Departement de Biologie, Service de Biophysique, Gif-sur-Yvette, France, 1987; J. William Fulbright Scholar, Leiden University, The Netherlands, 1995; President, International Carotenoid Society, 2002-present.

**Research Interests:** Structure and function of carotenoids, energy and electron transfer in photosynthesis, molecular spectroscopy and magnetic resonance of biological pigments and pigment-protein complexes.

**ASP Service:** Member since the early eighties; Symposium organizer, session chair, speaker, and regular attendee at Annual Meetings; Contributor to *Photochemistry and Photobiology* as author and reviewer.

**Candidate's Statement:** As a member of the Council, I would work to promote all areas of photobiology, pure and applied, academic and commercial, research and educational. Ours is a Society that is on the cutting edge of scientific and information technological advances. It is our responsibility to embrace these advances

and use them in ways that stimulate interactions between photobiologists in different parts of the world and different areas of the field. We must continue to find new ways to facilitate interdisciplinary collaborations and scientific exchanges among members, to promote education and communication between members and the public, and to provide help and advice to younger researchers entering the field and to those in technologically lesser developed countries. These tasks can be accomplished through a strong outreach program, through sound financial management that keeps the cost of the annual meetings within reach of younger investigators, and through our journal, Photochemistry and Photobiology, which must be maintained at a high standard and keep pace with new electronic processing methodologies as they emerge. Print subscriptions will undoubtedly continue to decline steadily, and Photochemistry and *Photobiology* must have a concrete plan to deal with this problem. Ownership and control of the electronic access to our journal is one key to ensuring the continued health and vitality of our Society in this rapidly evolving market. The Council must work diligently on this issue and many others, and I would be very pleased to be part of that effort.

### John Sutherland

Division 1 (Photochemistry, Photophysics, Phototechnology) and Division 5 (Environmental Photobiology and UV Effects) Physics Department, East Carolina University and Biology Department, Brookhaven National Laboratory

**Education:** Ph.D., 1967 Physics, Georgia Institute of Technology (Thesis title: Optical Properties of Sodium in the Vacuum Ultraviolet); M.S., 1964, Physics, Georgia

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Institute of Technology; B.S., 1962, Physics, Georgia Institute of Technology

**Appointments:** September 2001 – Present: Physics Department, East Carolina University (Professor and Chair); June 1977 – Present: Biology Department, Brookhaven National Laboratory (Scientist/Senior Scientist); April 1973 - May 1977: Dept. of Physiology and Biophysics, University California, Irvine (Assistant/Associate Professor); August 1972 -March 1973: Department of Chemistry, University of Southern California (Research Associate); July 1969 – July 1972: Calvin Laboratory, University of California, Berkeley (postdoctoral fellow); August 1967 – July 1969: Department of Molecular Biology, Walter Reed Army Research Institute (Captain, U.S. Army Medical Service Corps); June 1965 – June 1967: Health Physics Division, Oar Ridge National Laboratory (Oar Ridge Associated Universities Graduate Fellow).

**Research Interests:** Ultraviolet Photobiology (technology for quantifying DNA damage and action spectra, quantifying pyrimidine induction in DNA of plants and human skin); Spectroscopy (Circular dichroism and fluorescence); Synchrotron Radiation and Free Electron Lasers (user facilities)

ASP Service: Member since 1975; Associate Editor of Photochemistry and Photobiology 1979 – 1983; Guest Editor of Photochemistry and Photobiology 1986: U.S.– Japan Workshop on Photobiology and Spectroscopy using Synchrotron Radiation; Organized symposia at ASP meetings: 1981 Williamsburg, VA (synchrotron radiation), 1993 Chicago, IL (free electron lasers), 2000 San Francisco, CA (Biological effects of UVA)

Candidate's Statement: UVA is not as efficient, per photon, in damaging DNA or other biological molecules compared to UVB and UVC. However, very high levels of UVA are present in sunlight and other polychromatic light sources to which almost all living organisms are exposed. Thus, ignoring the contributions of the UVA distorts predictions of the biological consequences of ozone depletion and may confound assessments of the long-term effects of sunscreen use – to mention only two of many examples. Experimental studies of the biological damages produced by UVA are hindered by the inadequacy of present monochromatic sources in this spectral region. Free-electron lasers are (finally!) reaching performance levels that can revolutionize studies of UVA photobiology. ASP should work actively to support the development and operation of FEL-based irradiation facilities that will be freely available to photobiologists from universities, government and industrial laboratories who need to study the biological effects of UVA. ASP should also work to secure adequate funding for research programs to assess the impact of UVA on a wide range of biological systems. There is a long tradition of federal support for such user facilities in other fields, but we must show the funding agencies that there is an active research community that needs high intensity UVA sources with support facilities appropriate for photobiology that will permit us to answer questions important to both science and society.

### Zalfa Abdel-Malek

Division 5 (Environmental Photobiology and UV Effects) Department of Dermatology University of Cincinnati

No other information.