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NEWSLETTER

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ASP - Newsletter

INTERNATIONAL CONGRESS

The Ninth International Congress on Photobiology and the twelfth ASP meeting will be held in Philadelphia July 1-6, 1984. The Marriott Hotel on City Line Avenue is the meeting site. A tentative schedule has already been mailed to the membership. Those who require additional information should contact: Ninth International Congress on Photobiology
c/o American Society for Photobiology
1340 Old Chain Bridge Road
Suite 300
McLean, VA 22101*

*Note new secretarial address.

New Workshop Proceedings

Topics in Photobiology - proceedings of an international workshop on photobiology held at Jeju National University, Jeju Korea, May-1982. This 237 page book was edited by Hyeong-Ok Kim and Pill-Soon Song. It contains chapters on: What is Photobiology?, Optical Spectroscopy of Biological Molecules, Flash Photolysis of Biological Molecules, Photosensitization of Bacteria and Yeast, Photosensitization and Singlet Oxygen Damage, Photochemistry of Psoralens, Effects of Light on Movement of Microorganisms, Phytochrome: Molecular Aspects, Photomorphogenesis in Plants, Mechanisms of Photooxidation and Chemiluminescence, Photoecology of the Colors of Bioluminescence in Fireflies, Light and the Primary Molecular Proceses of Vision, Recent Advances in Photosynthetic Electron Transport. Members interested in obtaining a copy of this work should contact: Dr. Pill-Soon Song, Department of Chemistry, Texas Tech University, Lubbock, Texas 79409.

POSITIONS OPEN

Postdoctoral Position for research in the area of the Genetics and Membrane Structure of Photosynthesis.

The overall goal of the research in this lab is to understand the relationship between membrane architecture and function in photosynthetic membranes. The organism utilized for these studies, the unicellular, transformable cyanobacterium Anacystis nidulans R2, was chosen because its procaryotic nature lends itself to a wide variety of biochemical, biophysical and genetic experiments. Membrane architecture has been analyzed from the perspective of individual membrane proteins, chlorophyll-protein complexes, photosystem (PS) particles, cytochromes, and the topology of these units within the membrane. We have also isolated highly-active, O_2-evolving PSII complexes. In addition, we have isolated temperature-sensitive, photosynthetic mutants as well as herbicide-resistant and metal-tolerant strains. We have also developed a cloning system that allows for direct selection of photosynthesis genes in A. nidulans, and have used this approach to isolate the gene coding for DCMU-resistance. The cloning system is made possible by the fact that this strain is transformable for exogenous DNA and possesses plasmids. The emphasis in the near future will be on PSII and the oxygen-evolving apparatus. A variety of approaches will be applied to this problem including isolation and further characterization of the PSII-oxygen evolving complex, with and without phycobilisomes, the effect of ions such as Ca^{+2} on O_2-evolution and PSII, reconstitution of PSII structure and function, isolation of specific PSII and herbicide-resistant mutants, and fluorescence analysis. In addition, the photosynthetic properties of cells that contain cloned genes (either normal or mutated) will be studied. Some mutants will be obtained by using the newer techniques of site specific mutagenesis on cloned genes with known DNA sequences. This postdoctoral position will be mostly concerned with the photosynthetic aspects of the overall problem. However, since other workers in the lab have had extensive experience in molecular

biology, this can be a good learning environment. The successful candidate can apply as many of the molecular techniques as desired, and can participate in any of a number of different specific projects. References: Guikema and Sherman - BBA 637, 189 (1981); BBA 681, 440 (1982); Arch. Biochim. Biophys. 220, 155 (1983) and Plant Physiol. 73, 250 (1983). Bricker and Sherman. FEBS Letters 149, 197 (1982). Golden and Sherman. J. Bact. 155, 966 (1983).

POSITION AVAILABLE: May, 1984 to Sept., 1984 for at least two years.
Salary: Approximately $15,000 per year with annual raises equivalent to NIH Postdoctoral Fellowships.
QUALIFICATIONS: Ph.D. in a Biological or Physical Science area; experience in some aspect of photosynthesis or membrane structure is preferred.
ENVIRONMENT: The laboratory is well-equipped for research in photosynthesis and molecular biology. Equipment includes an SLM 8000S Spectrofluorimeter, a DW-2, fast kinetic fluorimeter and Hewlett-Packard HP-85 and 9816S computers. Most of the other investigators in the modern building are concerned with research in genetics and cell biology and jointly administer a large NIH Predoctoral Training Grant in Cellular and Molecular Genetics.

SEND CURRICULUM VITAE, THREE LETTERS OF RECOMMENDATION, AND OFFICIAL UNDERGRADUATE AND GRADUATE TRANSCRIPTS TO: Dr. Louis A. Sherman, Professor, University of Missouri, Biological Sciences Division, 110 Tucker Hall, Columbia, Missouri, 65211.

DURING 1984, the Division of Molecular Plant Biology at the University of California, Berkeley, will periodically have postdoctoral positions available in several areas of plant biology: molecular biology, biochemistry, physiology and biophysics. Interested individuals should wirte: Chair, Division of Molecular Plant Biology, Hilgard Hall, University of California, Berkeley, CA 94720. The University of California is an Affirmative Action, Equal Opportunity Employer.

POSTDOCTORAL position is available immediately for an individual with a Ph.D. in biochemistry, molecular biology, radiation biology or related field for studies on damage and repair of DNA in human cells treated with cancer chemotherapeutic agents or radiation. Send curriculum vitae, names and addresses of three references to: Dr. Thomas P. Brent, Division of Biochemical & Clinical Pharmacology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, Tennessee 38101.

UNIVERSITY OF GEORGIA. Biochemistry. Post-doctoral position in Physical Biochemistry or Enzymology. Mechanism of bioluminescence with bacterial luciferase, interaction of lumazine protein, measurements of fluorescence lifetime, anisotropy, etc. Well-equipped, active, and broadly based group. Pre-doctoral support is also available for prospective graduate students. Applicaticns or enquiries to: Dr. John Lee, Bioluminescence Laboratory, Department of Biochemistry, University of Georgia, Athens, GA 30602.

Meetings

1984
July 6-7 Porphyrin Photosensitization Workshop. In conjunction with the 9th International Congress on Photobiology, at the Marriott Hotel in Philadelphia. For furhter details write to Dr. David Kessel, Department of Medicine, Harper-Grace Hospitals, 3990 John R. Street, Detroit, MI 48201.

1984

Aug 5-9 "The Rockies: Evolution, Diversity, and Change" is the theme of the 35th Annual Meeting sponsored by the American Institute of Biological Sciences to be held at Colorado State University, Fort Collins. Dr. Ralph (Tex) Baker, Professor of Botany and Plant Pathology at CSU is serving as General Chairman.
Field trips, symposia, contributed paper and poster sessions, workshops, business meetings and social functions will be presented by the following national scientific societies: American Bryological and Lichenological Society, American Fern Society, American Society of Plant Taxonomists, Association for Tropical Biology, Botanical Society of America, Ecological Society of America, International Society for Ecological Modelling, Mycological Society of America, Phi Sigma Biological Honor Society, Phycological Society of America.
Registration fees before June 15: $55.00 Regular or $25.00 full-time students. To register and for more information see the February issue of BioScience or contact the Meetings Department, A.I.B.S., 1401 Wilson Boulevard, Arlington, VA 22209, Tel: 703/527/6776.

Aug 16-18 Conference on Plant Pyrroles. The format of the conference will be similar to that of the meetings on chloroplast development which have followed the last three photosynthesis congresses, that is, the meeting at King's College London, hosted by Dr. J.W. Bradbeer in 1977, the meeting at Halkidiki, Greece, hosted by Dr. G. Akoyunoglou in 1980, and the meeting at Liege, hosted by Dr. C. Sironval in 1983. We are presently planning to have seven sessions. For each session, there will be a moderator who will introduce the topic, open it up for discussion, and chair the discussion. Each discussion will emphasize recent research developments. During its course, each participant will have the opportunity to show one or two slides and to make a brief presentation of pertinent research results. However, there will be no contributed papers. We hope to arrange space for hanging posters, but we trust that most of the experimental information will be presented at the American Society of Plant Physiologists meeting immediately preceding our conference, and that during the two days we are together we will concentrate on drawing conclusions from past work and tracing directions for future work. There will be no simultaneous sessions.
DISCUSSION SESSIONS: Chlorophyll biosynthesis, Heterogeneity of chlorophyll structure and function, Breakdown of chlorophyll and other Mg-containing tetrapyrroles, Heme synthesis and breakdown in plant tissues, Biogenesis of linear tetrapyrroles, Phytochrome structure and function, Phycobilisome structure and function.
Since the absolute maximum capacity of the Ralston-White Conference Center is forty-five participants, we must ask you to firm up your reservation now by sending a check for $100.00. We hope this will cover the entire expense including transportation from Davis to the Conference Center and transportation from the Conference Center to San Francisco Airport. At any rate, the cost will not exceed $125.00 as originally announced. Reservations will be allocated on a first come first served basis, so get your check in as soon as possible.
Checks may be drawn on any U.S. bank and must be made payable to the "Regents of the University of California". In order to avoid confusion in bookkeeping, please write in parenthesis (Plant Pyrrole Conference). For further information contact: Paul A. Castelfranco, Department of Botany, University of California, Davis, CA 95616, U.S.A.

Aug 26-31 Fifth International Conference on Photochemical Conversion and Storage of Solar Energy. To be held at Osaka Science and Technology Center, Osaka, Japan.
The scientific programs will include contributed papers in poster sessions, plenary lectures, invited lectures, and panel discussions. Speakers include: T. Matsuo, S.R. Morrison, J. Rabani, H. Tributsh, M.S. Wrighton, Z. Yoshida, E. Amouyal, A. Fujishima, A. Harriman, G. Hodes, T.A. Moore, Y. Nakato, J.R. Norris, T. Sakata, I. Tabushi, and M. Tomkiewicz. Contributed papers will be presented in the poster sessions. Abstracts of the contributed papers must be received before the end of May, 1984.
For futher information please contact the chairman: Professor Hiroshi Tsubomura, Laboratory for Chemical Conversion of Solar Energy, Faculty of Engineering, Science, Osaka University, Toyonaka, Osaka 560, Japan.

1984

Sept 16-28 NATO ASI PRIMARY PHOTO-PROCESSES IN BIOLOGY AND MEDICINE. Co-Directors: R.V. Bensasson (Paris); G. Jori (Padua); E.J. Land (Manchester) and T.G. Truscott (Paisley, Scotland). To be held at Bressanone, Italy (Alpine Region).
The institute will discuss the techniques for the investigation of the primary events following the absorption of U.V. and visible light by biological systems and will emphasize the application of these techniques to the study of cancer photochemotherapy, photo-dermatology and the phototherapy of neo-natal jaundice.
Main topics include: Flash Photolysis, Pulse Radiolysis, Transient Detection, Time-Resolved Fluorescence, Resonance-Raman, Photo-CIDNP NMR, EPR, Spectro-Electrochemistry, Photo-Acoustic Spectroscopy, Luminescence Spectroscopy, Photosensitisation, Furocoumarins, PUVA Therapy, Skin Photoprotection, Cell Photosensitisation, Porphyrins and Bile Pigments.
In addition workshops will be organized on specific topics and short contributions from participants will be encouraged and considered for publication in the NATO ASI series text book arising from the institute.
Some Financial Support will be available for all participants and further information may be obtained from any of the above co-directors and will be co-ordinated by: Professor T.G. Truscott, Chemistry Department, Paisley College, Paisley, PA1 2BE, Scotland, U.K.
The number of participants will be limited to about 50.

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