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ASP - Newsletter

ASP President

Dr. Irene E. Kochevar

Irene Kochevar is an organic photochemist on the research staff of the Department of Dermatology, Harvard Medical School at the Massachusetts General Hospital. As a Principal Investigator in the Photomedicine Unit, she pursues her research interests in mechanisms of drug photosensitization, cutaneous photochemistry, and therapeutic applications of photochemistry.

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Dr. Kochevar received a Ph.D. degree in chemistry from Michigan State University in 1970. Her research with Professor Peter Wagner concerned the quenching of ketone triplets by mono-olefins and aspects of diffusion-controlled triplet-triplet energy transfer. After a year as an NIH postdoctoral fellow in the laboratory of Professor David Schuster at New York University, she worked for two years as a research chemist for Union Carbide on polymerization catalysts. She then spent seven years at Columbia University, initially as an NIH research fellow with Professor Nicholas Turro studying aspects of electronic energy transfer. As she became more interested in photochemistry of biological systems, Dr. Kochevar was appointed as research associate in Biochemistry and Dermatology, and then an assistant professor of Dermatological Biochemistry at the College of Physicians and Surgeons at Columbia. Her research centered on mechanisms for photoallergy to compounds such as salicylanilides and musk ambrette and the photochemical mechanism for phototoxicity to drugs such as protriptyline and chlorpromazine.

She moved to Boston in 1981 to assume her present position. Her recent research has focused on aspects of medically relevant photochemistry. She has investigated mechanisms of membrane photosensitization by drugs such as benoxaprofen, chlorpromazine, and amiodarone, and of photoinitiated DNA damage by chlorpromazine and dyes. She also studies direct ultraviolet light damage to cell membranes and DNA in skin in order to understand the mechanisms for sunburn and abnormal responses to sun.

Dr. Kochevar has been active in the American Society for Photobiology, serving as a Councillor (1980-1983) and as chairperson of the Membership and Education committees. She has been an Associate Editor of Photochemistry and Photobiology since 1983.

Beijing International Conference on Photochemistry - Beijing, China, October 21-26, 1985

The aim of the conference is to bring together scientists from the United States of America, Japan, Canada, some of the European countries as well as China to exchange views based on their theoretical and experimental researches in the field of photochemistry including organic photochemistry, polymer photochemistry, biophotochemistry, photoelectrochemistry and applied photochemistry. The conference will also review the present status and discuss future development photochemistry. The conference will also review the present status and discuss future development in this area. The deadline for registration and for submission of extended abstracts was June 25, 1985. For late information, correspondence should be sent to: Prof. Y. Cao, Co-Chairman of Organizing Committee Beijing International Conference on Photochemistry, Institute of Photographic Chemistry, Academia Sinica, Bei Sha Tan, Beijing, China. Tel: Beijing 277061.

*Editor's Note: The editor was away from his institution during the preparation of this issue of the Newsletter. Rebecca E. Conner, a graduate student at Western Kentucky University, is responsible for collating and editing most of the information reported here.



School Report - Henryk Manikowski

Creation and Deactivation of Excited States of Biological Molecules - Rolobrzeg, Poland April 22-28, 1985

This school was organized by the Institute of Physics, Poznan Technical University under the auspices of the Photobiological Group and the Polish Biophysical Society. The school was sponsored by the Poznan Technical University and Committee of Spectroscopy of the Polish Academy of Sciences. Sixty-two participants attended the school. Seventeen lecturers were invited from different European and American countries. Four major topics were discussed. The following is a list of the topics, the presentations and the authors.

- I. Photochemistry of Biological Molecules
 - Generation of electronically excited species in different "dark" biological processes. Prof. G.P.G. Cilento, University of Sao Paulo, Brazil.
 - 2. Molecular mechanism of bacterial bioluminescence. Prof. J. Lee, University of Georgia, Athens, Georgia, U.S.A.
 - 3. Single and double proton transfer in biological molecules and examples of model compounds. Prof. A. Grabowska, Polish Academy of Sciences, Warsaw, Poland.
 - 4. Photophysics of chlorophyll molecules. Prof. G.P. Gurinovitch, Academy of Sciences BSSR, Minsk, USSR.
 - 5. Molecular reorientation in model bilayer structure. Prof. Z. Pajak, Adam Mickiewicz University, Poznan, Poland.
- II. Excited States of Flavines and Alloxazines
 - Time resolved fluorescence properties of flavoproteins showing the conformational changes and concomitant increase of the mobility of the protein bond flavin as an important factor in the catalytic reaction. Prof. F. Muller, Agricultural University, Wageningen, The Netherlands.
 - 2. Flash photolysis of triplet states of isoalloxazines and alloxazines. Prof. P.F. Heelis, North East Wales Institute, Clwyd, England.
 - Fluorescence properties of flavodoxines: biexponential decay of its fluorescence and fluorescence anisotropy decay. Prof. A.J.W.G. Visser, Agricultural University, Wageningen, The Netherlands.
 - 4. Studies on photochemical reactivity of alloxazines with emphasis on alloxazine-isoalloxazine phototautomerism. Prof. J. Koziol, Academy of Economics, Poznan, Poland.
- III. Primary Processes of Photosynthesis. A summary with emphasis on excitation energy migration between antenna pigments was presented by D. Frackowiak, Poznan Technical University, Poznan, Poland.
 - Efficiencies and rates of energy transfer between pigments consisting of phycobilisomes on the basis of time resolved absorption spectroscopy. Prof. L.G. Erokhina, Institute of Photosynthesis and Soil Science, USSR Academy of Sciences, Pusching, USSR.
 - 2. Deactivation processes of phycobilisomes in oriented systems on the basis of polarized photoacoustic spectroscopy. Prof. D. Frackowiak.
 - 3. Photosynthetic electron transport processes controlled by various electrolytes. Prof. G. Papageorgiou, Nuclear Research Center Demokritos, Athens, Greece.
 - 4. Chemical creation of excited chlorophyll by reversal of photosynthetic reactions and its practical application in detection and diagnosis of damage to plants. Prof. L.O. Bjorn, University of Lund, Lund, Sweden.
- IV. Experimental Methods.
 - Photoacoustic technique: new and useful applications in complex systems where energy transfer processes are involved. Prof. R.M. Leblanc, University of Quebec, Trois-Rivieres, Canada.
 - Fluorescence spectroscopy with picosecond time resolution using single pulse excitation providing low excitation intensity. Prof. A. Freiberg, Estonian Academy of Sciences, Tartu, USSR.

For further information please contact Dr. Manikowski at Politechnika Poznanska, Instytut Fizyki, ul. Piotrowo 3, tel. 782-324, skrytka pocztowa nr 5, 60-965 Poznan, Poland Member Societies As an example of the breadth of ASP, individual members belong to various societies as listed here: AAAS EMSA AAPM EX. ACS Genetics Soc. Am. ASBC Inter American Photochem ASPET Intl. Soc. Chronobiol. AVS Japan Chem. Soc. Am. Acad. Dermatology Japan Mass Spectroscopy Society Am. Assoc. Physics Teachers Japanese Biophysical Society Am. Assoc. of Immunologists NYS Amer. Acad. Pediatrics OSA Amer. Coll. Nutri. Radiation Research Society Amer. Fed. Clin. Res. Soc. Ped. Res. Amer. Inst. Nutri. Soc. of Investigative Dermatology Amer. Soc. Microbiology Society of Experimental Biology American Society of Plant Physiologists The Royal Society of Chemistry **Biophysical Society** Vitamin Soc of Japan British Assoc. for Cancer Research Weed Science Soc. of America

News from AIBS

A New National Center for the Life Sciences

C. Herb Ward, Ph.D., President of the American Institute of Biological Sciences (AIBS) and Professor of Biology and Environmental Sciences at Rice University, has announced the implementation of a long term facilities development plan for the Institute. Effective April 22, 1985, the Institute's headquarters are located at 730 Eleventh Street, N.W., Washington, DC 20001-4584. With this move, AIBS becomes the prime occupant of an office building, which will be dedicated to a variety of programs in the life sciences.

In commenting on the relocation, President Ward noted that "the new facility fulfills a goal set less than a year ago by the Board of Directors to purchase a building in the Washington, DC area to support current operations and provide for future growth. We now have the opportunity to greatly enhance our program of national meetings organized and hosted by the Institute. We will also bring significant long term stability to our housing costs and thus be able to devote more of our resources to programs of benefit to the biology profession."

The new quarters will enable AIBS to expand the scope and variety of the services it offers to federal agencies, other national associations in the life sciences and its several dozen member societies and research laboratories. In particular, there are three separate meeting rooms in the building. The first is classroom-sized, and can seat 80-100 for symposia and group presentations and 50-60 for workshops and lectures. The second room is arranged in conference style and can accomodate committees, task forces, and other group activities of 15-25 persons. The third is a small meeting room for working groups of 8-12 persons.

The facility provides about 25% more operating space than AIBS currently uses. Under the development plan submitted to the DC Government, the added space would be available to expand Institute programs and activities and to provide operating space for member societies who wish to establish a Washington office. These member societies would share the benefits of the long term budget stability which this venture represents to the Institute as well as have access to a complete range of administrative support services.

Future Meeting Sites

- 1986 June 22-26 Los Angeles The meeting in 1986 will be at the <u>Sheraton Universal City</u> (west of Los Angeles). Single, twin, or double will generally be \$67, with 50 rooms set aside for students as double, triple, or quad also for \$67. This hotel is located in a mountain pass in the Hollywood Hills, and is, according to the blurb, "smog free", but we take that with a grain of soot. It is located on the world's largest movie studio lot.
- 1987 June 21-25 Site still undetermined
- 1988 Site and date for annual ASP to be determined. International Congress to be held that year in October in Israel.

Position Available

Postdoctoral Research Associate. One, and possibly a second, postdoctoral research position will become available starting September 1, 1985, for persons interested in investigating the O_2 -evolving process of photosynthesis and the properties of photosynthetic membrane surfaces. Areas of interest include structural, biochemical, biophysical, and molecular biological studies. The position is for one year with the possibility of extension to a second year depending on the research progress and availability of funding. Salaries are highly competitive. Send a CV, short statement of research interests, and names of three professional references to: Dr. Michael Seibert, Solar Energy Research Institute, Golden, CO 80401.

NOMINATIONS FOR OFFICERS

The Nominating Committee of ASP, Chaired by Walt Shropshire, is soliciting nominations for President-Elect and Councilors. Nominations for offices to become vacant can be made by the Committee and also by signed petition or letters from the Membership. Nominations for President-Elect may be made by ten (10) members in the form of signed petition or letters. In addition, a written statement by the nominee of willingness to serve must also be received.

The election of <u>Councilors</u> shall follow the same schedule as for the election of Officers. Nominations for a Councilor position may be made by five (5) members in the form of signed petition or letters. In addition, a written statement by the nominee of willingness to serve must also be received.

In order that the names of persons so nominated may appear on the Ballot, petitions or letters must be received by the Society by <u>1 November 1985</u>. The final list of nominees arranged as a Ballot, and containing more than one name for each vacancy to be filled, shall be mailed to the Membership. The candidate for each office receiving the highest number of votes will be elected.

All Officers and Councilors shall take office at the end of the Annual Business Meeting.

Please address all Petitions/Letters and nominees' statements of willingness to serve to:

Richard J. Burk, Jr. Executive Secretary American Society for Photobiology 1340 Old Chain Bridge Road Suite 300 McLean, VA 22101

AMERICAN SOCIETY FOR PHOTOBIOLOGY

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