



# Newsletter

Published Quarterly by the Association of Environmental Engineering Professors

VOLUME 14, NO. 2

**APRIL, 1979** 

### PRESIDENT'S CORNER

AEEP has 15 committees, covering subjects ranging from "Archives" to "Workshops." I call your attention to a few of these committees in this letter, and invite your participation in these and other projects of the Association.

The Workshop Committee is presently chaired by Don Lauria. Together with Dominic DiToro of Manhattan College, he has prepared a one-day workshop on "Optimal Process Design" to be held in May at Purdue University. The workshop is a service to AEEP members and their students, and is also open on a space-available basis to other interested professionals. I invite your participation in this workshop and recommend it to you. It is now time to begin selecting a subject and lectures for the 1980 Workshop. This topic will be discussed at the meeting of the Board of Directors at Purdue on May 6, 1979. Please send any suggestions you may have to me by that time.

The Awards Committee is presently administering three annual awards for outstanding doctoral research. One is for exceptional chemical research in the area of Industrial Waste Treatment. This award is cosponsored by the Nalco Chemical Company and AEEP and was presented for the first time last year at the annual meeting of the Water Pollution Control Federation. A second award is for exceptional chemical research in Water and Wastewater Treatment. This award is also cosponsored by the Nalco Chemical Company and AEEP and will be presented for the first time at the annual meeting of the American Water Works Association this June. The third award is for exceptional doctoral research contributing to Environmental Emgineering and Science. This award is cosponsored by Engineering-Science Inc. and AEEP and will be presented for the 11th time at the 1979 fall meeting of WPCF.

The Education Committee of AEEP is chaired by Jim Patterson. With the American Association of Environmental Engineers, the committee is actively planning the Fourth National Conference of Environmental Engineering Education to be held in the Spring of 1980. The educational needs of the environmental engineers are changing and the directions of the profession are enlarging. This conference provides an opportunity for us to assess our present

strengths and weaknesses, and to plan for future development. In my opinion it is the most important activity of that Association at this time and over the next year. The profession needs your ideas, your interest, and your efforts in planning and conducting a successful conference.

For those members and associates who plan to attend the AWWA Conference in June, the General Meeting of the Association will feature a discussion about organics in water supplies. This session is being organized by Dr. Michael Kavanaugh and will be structured to promote discussion on any aspect of this subject among those attending. Bring your ideas and your slides.

Other activities of the Association include but are not restricted to teaching methodology, international activities and interactions with federal agencies regarding support for education and research. Past accomplishments were derived from past efforts. Future progress requires new contributions from all of us.

Charlie O'Melia

### IMPORTANT AEEP MEETINGS AT PURDUE

WORKSHOP:

8:30 a.m. - 5:00 p.m.

Monday, May 7, 1979

Room 214 Stewart Center

See article in this NEWSLETTER for details.

GENERAL BUSINESS MEETING:

8:00 p.m. Tuesday, May 8, 1979

Room 214 Stewart Center

Please make your plans to be in attendance at both of these

AEEP BOARD MEETING:

Sunday, May 6, 1979

Hilton Hotel

If you have items that you wish the Board to consider please contact President O'Melia as soon as possible.

### WELCOME TO NEW AEEP MEMBERS

James J. Bertucci
Environmental Engineering
Illinois Institute of Technology
Chicago, Illinois 60616
312-567-3535

Eric Davis
Department of Civil Engineering
University of Saskatchewan
Saskatoon, Saskatchewan
Canada S7N 0W0
306-343-5473

Paul A. Jennings
Dept. of Envir. Engr. & Envir. Sci.
Florida Institute of Technology
Melbourne, Florida 32901
305-723-3701 ext 113

James C. O'Shaughnessy Department of Civil Engineering Northeastern University Boston, Massachusetts **021**15 617-437-2444

William R. Roach 1140 NW 63rd Suite 514, Box 152 Oklahoma City, OK 73116 405-848-7792

Constantine Yapijakis (affiliate member)
Dept. of Civil and Environmental Engineering
Polytechnic Institute of New York
333 Jay Street
Brooklyn, NY 11201

Paul B. Zielinski Environmental Systems Engineering Clemson University Clemson, South Carolina 29631 803-656-3276

### USANC REPORT AVAILABLE

A report prepared for the EPA by the USA National Committee for representation of the United States to the IAWPR on "Developments at Ninth International Conference on Water Pollution Research" is available from the National Technical Information Service as their number TB-288650-AS. The cost is \$8.00 in paper and \$3.00 on microfilm.

### **PUBLICATION OF THESIS TITLES**

As a service of the AEEP Membership, the Board of Directors has decided to publish the titles of theses completed each academic year by June 30. Only those lists submitted by the membership will be included in the listing. The next directory will appear early next fall for the 1978-79 work.

Time interval: July 1, 1978 to June 30, 1979

Classification of Titles:

Air Pollution

Agricultural Waste Management Instrumental Methods of Analysis

Industrial Waste Treatment

Land Treatment

Non Point Pollution

Rivers, Estuaries, and Lakes

Solid Wastes

Water and Wastewater Treatment

Water Management

You may also use other classifications if there are a sufficient number of titles.

Format: "Title of Paper", Name of Author (Ph.D. or M.S.), X pp., Month, Year, Name of University (Name of Faculty Advisor).

Comments: Since the availability of documents varies, persons interested in a specific publication will be asked to contact the Faculty Advisor directly.

Deadline: Submit by August 31, 1979 to:

J. F. Judkins, Jr. and J. M. Morgan

Co-Editors

**AEEP Newsletter** 

Department of Civil Engineering

Auburn University

Auburn, Alabama 36830

### **AEEP ARCHIVES**

Kurt Keeley, working under the direction of Dave Hendricks of the Archives Committee, is seeking to complete a collection of APSE and AEEP Newsletters. Anyone having any of the issues listed below is urged to help Kurt by sending them to:

Kurt Keeley American Water Works Association 6666 W. Quincy Avenue Denver, Colorado 80235

Volume No.	Issue No.
1	1,2,4
2	2
5	4
6	A11
7	A11
8	1,3
10	4
12	2

### **AEEP WORKSHOP AT PURDUE**

A one-day workshop on Optimal Process Design will be held at Purdue University Monday, May 7, 1979, immediately preceding the Purdue Industrial Waste Conference. The goal of this workshop is to examine how mathematical expressions that describe treatment plant performance can be used for optimal process design. The specific objectives are to provide instruction in (1) developing deterministic and stochastic process equations, (2) formulating optimal design problems, and (3) using optimization and other techniques for problem solution.

Registration is free for AEEP members and for students and \$25 for non-members. Interested persons are encouraged to pre-register because enrollment will be limited to 150 participants.

AEEP workshops are one way that the organization serves its members. Please do yourself and the organization a favor by taking advantage of this opportunity to gain new information. For further details contact Dr. Donald T. Lauria, Department of Environmental Sciences and Engineering, University of North Carolina, Chapel Hill, North Carolina 27514. Telephone (919) 966-1023.

#### AEEP WORKSHOP AT THE AWWA CONFERENCE

AEEP will hold an evening workshop at the AWWA Annual meeting at 8 p.m., June 27 in San Francisco, Ca.

The workshop will consider the topic, "Organics in Water Supplies". After several brief presentations, the meeting will be opened for discussion. The audience will be encouraged to present their views, discuss current and planned research and consider problems in measurements, analysis and health effects.

The workshop will be preceded by a very brief business meeting.

For more information, contact John T. Novak, Department of Civil Engineering, University of Missouri, Columba, Mo. 65211, telephone (314) 882-3587.

### AMERICAN ACADEMY OF ENVIRONMENTAL ENGINEERS

AEEP members have approximately three months in which they can seek certification without examination under the grandfather clause. To exercise this privilege applications should be submitted by July 1, 1979. Experience can be anticipated up until October 1, 1979. The basic requirements are a baccalaureate degree in engineering (or other approved major), registration in some state, and 15 years of acceptable experience (11 in responsible charge of work). A number of AEEP members have already taken advantage of the grandfather clause arrangement, but certainly there are many more who are eligible to do so. For more information write or call:

Dr. P. W. Purdom, P.E. Director, Environmental Studies Institute Drexel University Philadelphia, Pennsylvania 19104 (215) 895-2265

### AEEP ANNUAL RESEARCH AWARDS

### Engineering-Science Inc./AEEP Award for Doctoral Research

Engineering-Science Inc. and the Association of Environmental Engineering Professors are pleased to announce that applications are being accepted for the Engineering-Science Inc./AEEP Award of \$2,000 for the best doctoral thesis contributing to the advancement of Environmental Engineering and Science published between June 1, 1978 and May 31, 1979. The award will be \$1,000 for the Ph.D. candidate and \$1,000 for the primary research supervisor, both monies to be spent at the individuals' discretion. One copy of the candidate thesis must be submitted to Mr. Robert L. White. President. Engineering-Science, Inc., 150 North Santa Ana Avenue, Arcadia, CA 91006 to arrive on or before June 30, 1979. Engineering-Science, Inc. will reproduce two additional copies of the thesis and forward them to AEEP judges. The winners will be notified by September 20, 1979, and the awards will be presented at the Water Pollution Control Federation meeting in Houston, Texas, in October,

### Nalco/AEEP Award for Chemical Research in Industrial Waste Treatment

The Nalco Chemical Company and the Association of Environmental Engineering Professors are pleased to announce that applications are being accepted for the Nalco/AEEP Award of \$2,500 for the best doctoral thesis in chemical research dealing with Industrial Waste Treatment published between June 1, 1978 and May 31, 1979. The award will be \$1,250 for the Ph.D. candidate and \$1,250 for the candidate's faculty advisor. Three copies of the candidate's thesis should be sent to Dr. Robert E. Selleck, Department of Civil Engineering, University of California, Berkeley, California 94720 to arrive on or before June 30, 1979. The winner will notified in September, 1979 and the awards will be presented at the Water Pollution Control Federation meeting in Houston, Texas in October.

### DEADLINE FOR JULY NEWSLETTER

Items to be included in the next issue should be received by the Editors no later than July 6, 1979. Please submit any items of general interest to the profession to:

> J. F. Judkins, Jr. and J. M. Morgan Co-Editors, AEEP NEWSLETTER Department of Civil Engineering Auburn University Auburn, AL 36830 (205-826-4320)

### MEETINGS OF INTEREST

### ELEVENTH MID-ATLANTIC INDUSTRIAL WASTE CONFERENCE

The Eleventh Mid-Atlantic Industrial Waste Conference will be held July 16 and 17, 1979 at the Pennsylvania State University, University Park, Pennsylvania. Topics of particular emphasis will be:

New Treatment Processes
Heavy Metal Wastes
Toxic Wastes
Sludge Treatment and Disposal
Effluent Discharge Guidelines
Pretreatment and Recycle Systems
General Economic Evaluation
For more information contact:

Dr. D. A. Long
Department of Civil Engineering
The Pennsylvania State University
212 Sackett Building
University Park, Pennsylvania 16802

### CONFERENCE ON WASTEWATER REUSE FOR GROUND RECHARGE

The Office of Water Recycling, California State Water Resources Control Board, together with the Departments of Water Resources and Health Services, American Water Works Association (California-Nevada Section), California Water Pollution Control Association, and California Association of Reclamation Entities of Water announces 1979 symposium, Wastewater Reuse for Groundwater Recharge, September 6 and 7, to be held at Kellogg West Center for Continuing Education, California State Polytechnic University at Pomona. This symposium is the first such meeting devoted entirely to the reuse of municipal wastewater for groundwater recharge both by spreading and injection, Technical and health issues related to standards. reclamation plant reliability, and fate of pathogens and stable micropollutants in the aquifer will be covered by experts from both the U.S. and abroad. For further information contact: Dr. T. Asano. Office of Water Recycling/SWRCB, P.O. Box 100, Sacramento, CA 95801; phone (916) 322-4546.

### NATIONAL SYMPOSIUM ON WASTEWATER AEROSOLS AND DISEASE

The public health significance of wastewater aerosols will be discussed in a national symposium sponsored by the U.S. Environmental Protection Agency to be held at Stouffer's Cincinnati Towers, Cincinnati, Ohio on September 19-21, 1979.

This symposium will bring together scientists, engineers, physicians, and federal, state and local health officials to review research on the transmission of disease agents by the aerosols generated from wastewater treatment plants.

Information presented will include a review of aerosols contaminants and the results of health studies conducted on exposed populations. The effects on sewer workers and treatment plant operators exposed to wastewater aerosols at specific sites will also be reviewed. Case studies will be presented for Tecumseh, Michigan; Tigard, Oregon; Cincinnati, Ohio; and Schaumburg and Skokie, Illinois. Suppression techniques and supression barriers will be evaluated and modeling applications for predicting levels of aerosol contaminants will be presented.

The symposium will conclude with a panel discussion to assess the information presented on the health effects associated with wastewater treatment plant aerosols.

The symposium is being coordinated by JACA Corp. Additional information may be obtained from Virginia Hathaway, JACA Corp., 550 Pinetown Road, Fort Washington, PA 19034, Telephone (215) 643-5468.

### CONFERENCE ON ADSORPTION TECHNIQUES IN DRINKING WATER

A 3-day international conference, "Practical Application of Adsorption Techniques in Drinking Water," will be held on April 30, May 1 and 2, 1979 at Reston Virginia.

The sponsors of the conference, the U.S. Environmental Protection Agency, Office of Drinking Water and Municipal Environmental Research Laboratory, in cooperation with the Environmental Research Information Center, and under the auspices of the NATO Committee for Challenges of Modern Society (CCMC), are inviting those who are familiar with the practical and technical aspects of drinking water problems and those who will eventually deal with problems of removing harmful substances from public drinking water supplies.

This conference will focus on the practical aspects of such adsorption techniques as GAC, ozone-enhanced biological activated carbon (BAC), powdered activated carbon (PAC) and macroeticular resins. More than 40 papers will be presented by speakers from eight countries.

Interested persons can obtain registration forms and information from:

Ms. Donna J. McCaughey CENTEL Corporation 11000 Sunrise Valley Drive Reston, Virginia 22091, USA

### UNDERGRADUATE REGISTER AVAILABLE

Copies of the Register of Undergraduate Environmental Engineering Programs are now available at a cost of \$6.00 each postpaid. Order from:

Dr. D. B. Autlenbach
Department of Chemical and
Environmental Engineering
Rensselaer Polytechnic Institute
Troy, New York 12181

### ACADEMIC MARKET PLACE UNIVERSITY OF DELAWARE

The Department of Civil Engineering is seeking a faculty member with a Ph. D. in the area of Environmental Engineering. A general civil engineering background is required, as is competency in the biological aspects of environmental engineering. Duties require instructing at undergraduate and graduate levels, conducting independent research and directing graduate students. Interested persons should send detailed resume and names of at least three references no later than June 1, 1979 to:

Chairperson
Department of Civil Engineering
University of Delaware
Newark, DE 19711

#### UNIVERSITY OF FLORDA

The Department of Environmental Engineering Sciences, University of Florida, invites applications to fill a tenure track faculty position, preferably at the Assistant Professor level, in water supply and wastewater engineering. Applicant must have an earned doctorate in Environmental or Civil Engineering. Training in Chemical Engineering and professional experience are highly desirable. Duties include conducting an active research program and teaching undergraduate and graduate courses. Rank and salary are commensurate with qualifications. Interested persons should contact:

Dr. W. Emmett Bolch, Chairman Search Committee Department of Environmental Engineering Services University of Florida Gainesville, Florida 32611

### GEORGIA SOUTHERN COLLEGE

The Division of Technology announces a tenure-track position opening at the Assistant/Associate Professor level beginning September 1979. Minimum requirements are an undergraduate degree in civil engineering and a Master's degree with an emphasis in environmental engineering. Three to five years of relevant teaching and/or engineering experience and P.E. or E.I.T. qualifications are desired.

The successful applicant will be expected to teach undergraduate environmental engineering technology and basic engineering science courses in an ECPD accredited Civil Engineering Technology baccalaureate program. The position requires a person who can prepare course materials, develop laboratory experiments, and relate well to students and other faculty members.

Statesboro is a city of 17,000 located 55 miles northwest of Savannah on U.S. Highways 301, 25 and 80. Georgia Southern was founded in 1906. It is coeducational with a fall quarter enrollment of almost 6500. The Division of Technology offers Master of Technology, Bachelor of Science in Technology and Bachelor of Engineering

Technology degrees. Present enrollment in Bachelor of Engineering Technology degree programs is approximately 200.

Send resumes and names and addresses of three references to:

Dr. Donald F. Hackett, Chairman Division of Technology, Box 8044 Georgia Southern College Statesboro, Georgia 30458

### UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

The Department of Civil Engineering invites applications to fill one or two positions at the Assistant Professor level (leading to tenure) in the area of Hydrosystems Engineering (analysis and design of groundwater systems preferably, hydromechanical systems, water resources systems, hydrologic systems, and hydraulic structural systems). Also the possibility exists of an appointment with tenure for a person with recognized national and international stature. These positions are available for Fall, 1979.

Duties include the teaching of undergraduate and graduate courses and active pursuit of research. A doctoral degree is required. Salary depends on qualifications. Applicants should forward a complete professional history including transcripts of academic records, a list of publications, and names and addresses of three or more references by June 1, 1979 to:

Jon C. Liebman, Head Department of Civil Engineering University of Illinois at Urbana-Champaign Urbana, Illinois 61801

### UNIVERSITY OF RHODE ISLAND

The Department of Civil and Environmental Engineering has a faculty vacancy in the Environmental Engineering area. This is a tenure-track position and the rank will be at the assistant or associate professor level depending on experience.

The applicant must possess a Ph.D. degree in Civil Engineering with a major in the environmental area; an undergraduate degree in Engineering and background and experience in water quality are also required. Interest and experience in problems of the ocean and coastal zones are preferred but not required. Duties will include undergraduate and graduate teaching, participation in and development of sponsored research and student advising.

Qualified applicants should submit a detailed resume including graduate academic program, reprints, and names of at least three references by May 15, 1979 to:

Dr. William E. Kelly, Chairman Civil & Environmental Engineering University of Rhode Island Kingston, RI 02881

### UNIVERSITY OF MAINE AT ORONO

The Civil Engineering Department announces two openings in the area of Environmental Engineering starting September 1979. One full time position at the assistant or associate professor level, and one visiting professor.

Responsibilities of the full time position include undergraduate and graduate teaching and participation in sponsored research. Candidates should have a Ph.D., a background in environmental engineering, and research interests appropriate to the study of inland and marine waters.

The responsibilities of the visiting position will be:

- Teaching courses in Environmental Engineering program, preferably in the area of Water Resources.
- Working with Environmental Engineering faculty and graduate students on ongoing research projects and/or to develop new research efforts within the scope of the Department.

Current research is in the areas of hydrology, ground water, coastal and estuarine engineering, water and wastewater treatment, and environmental measurement.

Deadline for applications, May 15, 1979.

Interested candidates should submit a complete resume including names of three references to:

Dr. John A. Alexander, Chairman Department of Civil Engineering 103 Boardman Hall University of Maine at Orono Orono, ME 04469

### VIRGINIA MILITARY INSTITUTE

The Department of Civil Engineering announces an opening at the Assistant/Associate Professor level beginning in August, 1979. The successful applicant should have a broad environmental engineering background and be interested in teaching undergraduate courses in one or more of the following: physical-chemical treatment processes, land disposal of waste, water supply, ground water hydrology, air pollution.

Preference will be given to applicants who possess a doctoral degree in engineering with an undergraduate degree in Civil Engineering. Professional registration and military experience are also desirable. The department has approximately 450 undergraduate students and 10.5 full time equivalent teaching positions at the present time.

Interested applicants should send a complete resume, preferably including both courses taken and courses taught, along with names and addresses of three references to:

Dr. J. R. Sculley, Head Department of Civil Engineering Virginia Military Institute Lexington, Virginia 24450

### WAYNE STATE UNIVERSITY

The Department of Civil Engineering has several tenure track positions available in Environmental Engineering, Water Resources, Transportation Engineering, Public Works Administration and Construction Management. Candidates should either have a Ph.D. degree in Civil Engineering with specializations as mentioned or should be in the process of obtaining a Ph.D. degree (degree to be obtained by September, 1979) in any one of the above specialities.

The department currently has a graduate level program with continued research support in Transportation and Geotechnical Engineering. There is a strong possibility of research program development in Environmental Engineering/Water Resources, Public Works Administration and Construction Management.

Responsibilities will include undergraduate and graduate teaching and the development of strong contract research programs.

Send resume to:

Tapan K, Datta Professor and Chairman Department of Civil Engineering Wayne State University 667 Merrick Detroit, Michigan 48202

### UNIVERSITY OF WISCONSIN-PLATTEVILLE

The Civil Engineering Department is seeking applicants for a permanent faculty position in the sanitary/environmental area. Duties include teaching undergraduate courses in sanitary engineering, pollution control, water distribution and treatment, fluid mechanics and hydrology. Prefer Ph.D. with practical experience and a strong interest in teaching rather than in research.

The University of Wisconsin-Platteville is basically a teaching institution rather than being research oriented, and all of our engineering programs are generally directed toward the practical, as opposed to the highly theoretical. The almost 1000 engineering undergraduates are enrolled in Agricultural, Civil, Industrial, Mechanical and Mining Engineering. We have no graduate programs in Engineering. The Civil and Mining curricula are accredited by ECPD. The other three are new programs that should be accredited in the early 1980's.

The campus is located in a community of 9500 in rural southwestern Wisconsin, 70 miles from Madison and 20 miles from Dubuque, Iowa. The University, which includes Colleges of Engineering, Agriculture, Business and Education, has a total enrollment of 4600 students.

Send resume and names of references to:

Keith F. Faherty, Chairman Department of Civil Engineering University of Wisconsin-Platteville Platteville, Wisconsin 53818

### INSTITUTE FOR RURAL WATER ESTABLISHED

In the January 1979 AEEP NEWSLETTER the formation of the INSTITUTE FOR RURAL SANITATION SERVICES was announced. That organization has recently undergone some changes and has been re-named the INSTITUTE FOR RURAL WATER.

According to Dr. Edwin Cobb, Executive Director of the INSTITUTE, the purposes and goals remain essentially the same as those previously mentioned in the AEEP NEWSLETTER except that the INSTITUTE is totally separate from National Demonstration Water Project (NDWP) with which it was formerly affiliated. It is believed that the reorganization will ultimately serve to benefit the interests of rural residents.

For more information contact the INSTITUTE staff at:

INSTITUTE FOR RURAL WATER 1725 DeSales Street, N.W. Suite 402 Washington, DC 20036 (202-296-8540)

## CALL FOR PAPERS

A conference will be held at Orlando, Florida on November 26-28, 1979 to discuss responses of receiving water bodies to urban and non-urban stormwater runoff. Prospective participants are cordially invited to submit abstracts for evaluation by the selection committee. Invited and contributed papers will be critically reviewed and selected for presentation in traditional technical sessions. Topical areas will include: Rainfall-Runoff relationships, Prediction of runoff water quantity and quality from urban and non-urban areas, Impact of runoff water on lakes/rivers/estauries, Fate of pollutants including heavy metals/nutrients/toxic substances, and Management techniques to control stormwater effects.

Abstracts should be between 250 and 500 words. Three copies should be submitted, typed double-spaced, to:

Dr. Yousef A. Yousef, P.E. College of Engineering CEES Department University of Central Florida P.O. Box 25,000 Orlando, FL 32816

The abstract should be submitted before April 30, 1979. The senior author of each abstract will be notified by the selection committee on the decision before the end of May. The full text of the paper should be submitted before October 1st, 1979, for inclusion in the proceedings. The conference will be co-sponsored by the U.S. Environmental Protection Agency, the Florida section of ASCE and the University of Central Florida.

### IAWPR CONFERENCE ON POLLUTION OF THE MEDITERRANEAN

An International Conference on the Pollution of the Mediterranean will be held in Palma de Mallorca, Spain from September 24-27, 1979. The theme will be the ecological, chemical, physical and engineering aspects of pollution of the Mediterranean Sea and its tributaries, including biological and chemical monitoring modeling studies of particular areas of the sea and case studies of importance. A section of the Conference will be devoted to national and international measures to deal with the problem of pollution in the area. Original papers dealing with research and development in the above subjects are invited for the conference. The deadline for completed papers is May 14, 1979. Authors intending to submit papers should apply without delay for details on preparation and typing of papers to the Secretary-Treasurer at the address shown below:

Secretary-Treasurer
International Association on Water Pollution Research
Chichester House
278 High Holborn
London WCI
England

### 10TH INTERNATIONAL CONFERENCE OF IAWPR

The 10th International Conference of the International Association on Water Pollution Research (IAWPR) will be held in Toronto, Canada June 23-27, 1980 and will cover a wide range of subjects ranging from natural aquatic ecosystems to wastewater treatment. Some specific topics are ecological problems of lakes and large impoundments; estuarine, coastal and marine pollution problems; and water and wastewater problems in arctic and subarctic regions. For information about the program and/or submission of papers (due 1 September 1979), contact the Secretary-Treasurer of IAWPR at the address shown above.

### FISHER JOINS STAFF AT UNIVERSITY OF IOWA

Robert A. Fisher recently joined the staff of the Environmental Engineering Program at The University of Iowa, Bob has been teaching at San Jose State University in California for the past seven years and completing the requirements for his doctorate from Stanford University. He previously received B.S. and M.S. degrees in chemical engineering from Cornell University and also holds an M.S. in civil engineering from San Jose State. Bob has served for two years as a project engineer in research and development with FMC Corporation. He has also served as a special consultant to consulting firms and industries. His specialty area is biological waste treatment systems. At The University of Iowa, Bob will serve as the coordinator of the teaching and research laboratories in Environmental Engineering and continue to develop his own research interests.

### ASSOCIATION OF ENVIRONMENTAL ENGINEERING PROFESSORS

Attn: Dr. Michael J. Humenick Dept. Civil Engineering The University of Texas at Austin Austin, Texas 78712

The publications listed below are available from AEEP. Prepayment must accompany all orders. Please forward a check or money order made payable to AEEP to the above address.

NOTE: The Order Form below must be completed and returned with your order. For orders of five or less volumes, include \$1.25 for postage and handling; for 6-10 volumes, \$2.50; for 11-15 volumes, \$3.75, etc. Federal Tax Identification Number:

QUANTITY	TITLE	PRICE	EXTENSION
	*Environmental Engineering Unit Operations and Unit Processes Manual	\$12.00	
	Water Chemistry Laboratory Manual	\$ 5.00	***************************************
	Register of Environmental Engineering Graduate Programs	\$ 3.00	
	Interdisciplinary Education Programmes for Environmental Engineers, Workshop	\$10.00	
	Aquatic Laboratory Manual	\$ 7.00	
	Trends and Professional Manpower Production Capabilities in USA Educational Institutions	\$ 3.00	
	Proceedings of the AEEP/NSF "Fundamental Research Needs for Water and Wastewater Treatment Systems" Conference, December 15, 1977	\$ 0.00	
*Environmental Engineering Unit Operations and Unit Processes Manual is available to members of AEEP for \$6.00 a copy. Members may order additional copies at membership rate for their students.  SHIPPING ADDRESS:		Texas 5% Sales Tax	
		Postage & Handling	
		TOTAL ENCLOSED	

### Application for Membership in the ASSOCIATION OF ENVIRONMENTAL ENGINEERING PROFESSORS

NAME					_
OFFICIAL TITLE	DEPAR	RTMENT			
BUSINESS ADDRESS		TEL			
HOME ADDRESS			TE	TEL	
Applying for: Membership Sta	atus (indica	te rank), Affiliate S	Status		
	PLEASE A	TTACH RE	SUME		
Dues are payable in the A according to the date of applic	cation, is shown be	elow:	ED BASED	dues payment, prorat	ed
RANK	1 Jan. 31 Mar.	1 April 30 June	1 July	1 Oct. 31 Dec.	
Professors Associate Professors Assistant Professors Affiliate Member	\$50.00 25.00 25.00 10.00	\$37.50 18.75 18.75 7.50	30 Sept. \$25.00 12.50 12.50 5.00	\$12.50 6.25 6.25 2.50	
Please return this form, along	with your dues to:				
	School of Purdue U	Leslie Grady, Jr. f Civil Engineering Iniversity vette, IN 47907			
Enclosed are my AEEP dues in	n the amount of: \$				
		Signature		Date	_

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