



# Newsletter

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MAY 1982

## PRESIDENT'S CORNER

What is the mission of AEEP? This question has surfaced at more than one recent Board meeting. Perhaps some contend we have no mission at all. As is my duty, I could tout our workshops, research awards, distinguished lecturer series, etc. However, our mission runs deeper. AEEP would like to improve the status of our profession as perceived by federal agencies. This is especially challenging at a time when national priorities seem to be directing the attention of EPA and other agencies away from research and training.

AEEP (AAPSE) was founded in the training grant era. It interacted closely with federal agencies in those critical years when our graduate programs were expanding rapidly and issues of curricula development and quality control were very important. The need for interaction is different now. Advancement or retreat in the environmental cause hangs in the balance. Federal agencies could use the technological expertise AEEP members have in shaping new legislation and regulations and in deciding how best to conduct research. AEEP might be the catalyst for preparation of position papers on forthcoming regulations or the conduit by which AEEP members are appointed to research advisory boards.

Because of its size, AEEP is not an effective lobbying force. We find it difficult to react to policies already set in motion. A case in point is the proposed OMB cut in R & D which includes elimination of extramural funding for water quality research (see my letter of March 19). Aside from the impact of the cut in dollars, this proposal is discouraging because it further alienates university research from the EPA mission; a national resource is being ignored.

It is understandable to me that AEEP members may feel uncomfortable wrestling with regulatory, legislative and budgetary issues. Such issues are not resolved by applying rigorous scientific methods with which we are so familiar. Yet, this is the reality of public policy. More changes are in the offing as solutions to our nation's environmental problems continue to elude us. AEEP and its members need to participate and to lead.

F.A. DiGiano

## AEEP WORKSHOPS

### 1. Purdue Conference

The AEEP workshop entitled, "Applying Chemical Structural and Thermodynamic Correlations to Treatment Process Selection" will take place on Monday, May 10, 1982, in room 214 of Purdue's Stewart Center. The workshop is free to AEEP members and students. Non-members will be admitted on a space-available basis. Please pre-register, by sending your name, title, address, and AEEP membership status to:

Dr. Wm. Brian Arbuckle  
Department of Environmental Engineering Sciences  
University of Florida  
Gainesville, FL 32611  
(904) 392-0843

The program for the workshop is as follows:

Time	Topic	Speaker
8:15	Registration	
8:45	Fugacity—Concepts and Application to Air Stripping	Dr. D. MacKay, Prof., Chemical Engg., Univ. of Toronto
10:30	Break	
10:45	Chemical Structure and Biodegradation	Dr. S.H. Yalkowsky
12:00	Lunch	
1:30	Solvophobic Theory—Concepts and Application to Reverse Osmosis and Adsorption	Dr. G. Belfort, Assoc. Prof., Chemical and Env. Engg., Rensselaer Polytechnic Institute
3:15	Thermodynamic Prediction of Adsorption	Dr. W. Arbuckle, Dept. of Env. Engg. Sci., Univ. of Florida

## 2. AWWA Conference, Miami, FL

AEEP will be offering an informal research seminar on Tuesday evening from 8-10 p.m., May 18, 1982, at the AWWA Conference in Miami, Florida. The topic for this research seminar is: "Disinfection Residuals in Water Distribution Systems: Microbiological Protection vs. Trihalomethane Control." Vincent P. Olivieri of Environmental Health Engineering at Johns Hopkins University will speak on: "Effectiveness of Free Chlorine in Water Distribution Systems." R. Rhodes Trussel of J.M. Montgomery Consulting Engineering in Pasadena, CA, will deliver a talk on: "When Should Chloramines Be Considered as a Means for THM Control?" Dr. P.C. Singer of the Department of Environmental Sciences and Engineering at the University of North Carolina at Chapel Hill is the Session Chairman.

## DISTINGUISHED LECTURER TOUR

Professor Charles R. O'Melia of The Johns Hopkins University was selected as this year's AEEP Distinguished Lecturer. A schedule of Dr. O'Melia's presentations, given between March 15-April 2, 1982, is shown below.

University	Lecture No.
Georgia Institute of Technology	3
California Institute of Technology	1
University of Washington	1 or 3
Illinois Institute of Technology	1
University of Texas-Austin	1
Utah State University	2 or 3
University of Utah	
Colorado State University	3
University of Florida	3
Miami University (of Ohio)	3
Pennsylvania State University	1
Drexel University	3

Lecture No.	Topic
1	Aquasols: Physical Aspects of the Behavior of Small Particles in Aquatic Systems.
2	Integral Analysis of Water Treatment Plant Performance.
3	Coagulation for the Removal of Natural Organic Substances from Water Supplies.

## PUBLICATIONS

A copy of the current order form for publications is attached to the newsletter. Note that two of our former publications are no longer available from AEEP. The Water Chemistry Laboratory Manual is now published by John Wiley and Sons, and the latest edition (1981) of the Register of Graduate Environmental Engineering Programs is published by Ann Arbor Science.

Planning for the revision of two publications is now going on, but it will be several months or more before the revised editions are available. These are the "Unit Operations and Unit Processes Laboratory Manual" and a booklet intended for high school students entitled "So You Want to Be an Environmental Engineer."

A video-tape of at least one of Dr. Charles O'Melia's talks as the AEEP Distinguished Lecturer of 1982 should be available as an AEEP "publication" by May 1. Reservations for its use can be made through the publications committee (address on publications order form). Details of this offering will be announced later but reservations will be accepted now.

## ANNOUNCEMENTS

### Nalco Chemical Award for the Best Doctoral Thesis on Chemical Research in the Area of Industrial Water and Wastewater Treatment or Combined Industrial/Municipal Waste

An award consisting of \$2,500 to be divided between the thesis author and his or her major professor (\$1,250 each) will be presented to the selected candidate at the Fall 1982 Water Pollution Control Federation meeting in St. Louis.

This award is sponsored by Nalco Chemical Company under the auspices of the Association of Environmental Engineering Professors (AEEP).

Doctoral theses completed over the past year (6/1/81 - 5/31/82) are eligible for submission for this award year. The research work must be related to the chemical aspects of industrial or water or combined wastewater treatment and must be complete at the time of submission since a copy of the dissertation is required for judging.

Submission of theses for consideration by the review committee must be received on or before June 15, 1982. Winners will be notified by September 1, 1982. Send 2 copies of the dissertation to:

Dr. Vernon L. Snoeyink  
Dept. of Civil Engineering  
University of Illinois  
Urbana, IL 61801  
217-333-4700

## AWWA Academic Achievement Award Competition

The Academic Achievement Award Committee of the American Water Works Association is now accepting entries for the 1983 Academic Achievement Award competition. This award is intended to encourage academic excellence by recognizing contributions to the field of public water supply. All Master's theses and Doctoral dissertations that are relevant to the water supply industry are eligible. The thesis or dissertation must reflect the work of a single author, and be submitted for a degree between September 1, 1981, and September 1, 1982. Entries must be postmarked by October 1, 1982, to be eligible for the 1983 award.

The best thesis and best dissertation will be awarded \$1,000 each, with second place awards of \$500 in both categories. In addition, distinctive commemorative plaques will be presented to winners and their academic advisors at the 1983 American Water Works Association's Annual Conference and Exposition in Las Vegas.

Official entry forms and information may be obtained by writing or calling the Academic Achievement Award Committee, American Water Works Association, 6666 W. Quincy Avenue, Denver, CO 80235, (303) 794-7711 ext. 251.

## Engineering Science, Inc./AEEP Award for the Best Doctoral Thesis Relevant to Environmental Engineering Practice

AEEP members are invited to submit Ph.D. theses completed under their supervision during the 1981-1982 academic year (dated June 1, 1981-May 31, 1982) for competition for the above award. The award is a certificate and a \$1,000 prize for the Ph.D. candidate and a certificate and a \$1,000 prize for the faculty research advisor. For a thesis to be eligible it must be completed by the above dates and one copy must be received by Mr. Don Suggs, Engineering Science, Inc., 125 West Huntington Drive, Arcadia, California 91006, prior to June 15, 1982. The judging panel for the award consists of Prof. David Jenkins, University of California, Berkeley, Chairman; Prof. Dean Adrian, University of Massachusetts, Amherst; and a member from Engineering Science, Inc. Each thesis is judged on the basis of 100 points allocated as follows:

Scientific and Technological Validity of Research	25
Originality of Research	25
Contribution to Advancement of Environmental Engineering & Science	40
Clarity of Presentation (Organization)	10

The award will be presented at the AEEP Meeting to be held during the WPCF 54th Annual Conference in St. Louis, October, 1982.

## Formation of a Working Committee for the Preparation of A Laboratory Manual of Computer Software in Environmental Engineering

The Association of Environmental Engineering Professors is organizing a committee which will gather computer software useful for the solution of environmental engineering problems. The committee will solicit documented computer software and serve as an editorial board of review in assembling this information for publication. The programs and documentation will be compiled and presented as a laboratory manual, similar in format to the current AEEP Unit Processes Laboratory Manual. The committee will organize a workshop at the 1983 Purdue Industrial Waste Conference to present the computer software intended for publication in the manual.

Anyone interested in serving on the committee or providing documented computer software should contact Dr. John Crittenden at the address below. Additional members are especially sought in the fields of aquatic chemistry, systems analyses, computer hardware and micro-computers. The first committee meeting is scheduled for the 1982 Purdue Industrial Waste Conference.

Dr. John C. Crittenden  
Committee Chairman  
Dept. of Civil Engineering  
Michigan Technological University  
Houghton, MI 49931  
Office: 906-487-2798  
Dept. Phone: 906-487-2520

## Call for Papers

Research papers are invited for the Diffusional Operations and Processes Program for the American Institute of Chemical Engineers (AIChE) 75th Annual Meeting to be held in Los Angeles, California, on November 14-18, 1982. Papers are being sought on "Precipitation Kinetics and Crystallizer Instabilities," and on "Nucleation, Growth, and Crystal Size Distribution." Titles and a 300-1000 word extended abstract should be submitted by April 15, 1982, to:

Prof. Greg. D. Botsaris Dept. of Chem. Engineering Tufts University Medford, MA 02166 617-628-5000	Prof. Robert W. Peters Environ. Engineering School of Civil Engineering Purdue University West Lafayette, IN 47906 317-494-2191
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## AEEP Member Elected as Chairman of EPA's Science Advisory Board

Dr. E.F. Gloyna, Dean of the School of Engineering at the University of Texas in Austin, TX, was recently elected as Chairman of the Environmental Protection Agency's Science Advisory Board.

### Address Correction

AEEP members who would like their NEWSLETTER mailed to a different address or who require other address corrections should send such information to:

Thomas M. Keinath  
Environmental Systems Engineering  
Clemson University  
Clemson, SC 29631  
803-656-3276

### Summer Postgraduate Program

An eight-week postgraduate program has been designed by the Lenox Institute for Research, Inc. to educate participants on the theories and practices of water quality control with special emphasis on flotation technology. Five courses are to be offered in Summer 1982:

1. Flotation and Related Adsorptive Bubble Separation Processes (June 21-July 2)
2. Design and Operation of Flotation Process Systems (July 5-16)
3. Environmental and Industrial Process Systems (July 19-30)
4. Water Quality Analysis and Process Control (Aug. 2-13)
5. Research (to be arranged)

For more information, please contact:

Dr. Lawrence Wang, Manager & Professor  
Lenox Institute for Research, Inc.  
101 Yokun Avenue  
Lenox, MA 01240  
(413) 637-1681

### AEEP Luncheon

The next AEEP Luncheon will be held on the Tuesday of the Purdue Industrial Waste Conference.

## September Newsletter Deadline

Items to be included in the September NEWSLETTER issue must be received no later than July 15, 1982. Please submit any items of general interest to the profession to the co-editors.

## ACADEMIC MARKETPLACE

**POSITION:** Director, Water Resources Research Institute of the University of North Carolina located at N.C. State University in Raleigh.

**QUALIFICATIONS:** Earned doctorate in engineering, life sciences, or social sciences and a record of significant accomplishment and professional stature in water resources research, education, planning, or management.

**RESPONSIBILITIES:** Director expected to devote more than 50 percent of time to Institute program, with remainder to research, teaching, and public service in water resources through academic appointment in department appropriate to training and experience.

### APPLICATION DEADLINE:

July 1, 1982

### CONTACT:

Dr. Larry K. Monteith, Chairman, Board of Directors, WRRI, Attn. Professor David H. Howells, 124 Riddick Bldg., N.C. State University, Raleigh, N.C.

### SCHOOL:

Illinois Institute of Technology

### POSITION:

Open

### QUALIFICATIONS:

Ph.D. in Engineering, interest in water, wastewater or industrial waste treatment. Preference will be given to individuals with design and/or industrial experience.

**RESPONSIBILITIES:** Research, graduate and undergraduate teaching.

### APPLICATION DEADLINE:

Open

### CONTACT:

Dr. James W. Patterson,  
Chairman  
Pritzker Department of Environmental Engineering  
Illinois Institute of Technology  
Chicago, IL 60616  
(312) 567-3535



**POSITION:** Tenure track faculty opening at the University of Massachusetts, Department of Civil Engineering, Environmental Engineering Program; rank and salary dependent on qualifications.

**AVAILABLE:** September, 1982

**DEADLINE:** Open

**QUALIFICATIONS:** Include expertise in groundwater quality or solid and hazardous waste management or water treatment. The appointment is intended for a dynamic researcher who is interested in playing a major role in the Environmental Engineering Graduate Program.

**RESPONSIBILITIES:** Teaching at both the undergraduate and graduate levels with research potential and achievement of prime importance.

**CONTACT:** Clive L. Dym  
Professor and Department Head  
Civil Engineering Department  
University of Massachusetts  
Amherst, MA 01003

**POSITION:** Faculty position at the Illinois Institute of Technology, rank dependent on qualifications.

**AVAILABLE:** Open

**DEADLINE:** Open

**QUALIFICATIONS:** Ph.D. in engineering; prefer that individual have some design or industrial experience.

**RESPONSIBILITIES:** Research; graduate and undergraduate teaching; interest in either water, wastewater or industrial waste treatment.

**CONTACT:** Dr. James W. Patterson  
Pritzker Department of Environmental Engineering  
Chicago, Illinois 60616

**Association of Environmental  
Engineering Professors  
Attn: Dr. Desmond F. Lawler  
Department of Civil Engineering, ECJ 8.6  
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: For orders of 1-3 volumes, include \$2.00 for postage and handling; for 4-6 volumes, \$4.00; for 7-9 volumes, \$6.00; for 10 or more volumes, \$8.00. These rates apply for Book Rate postage within the United States. For delivery outside the U.S. or for speedier delivery (by First Class Mail or by UPS), additional postage and handling charges will be billed to you. Please indicate below if you require this special handling.

Quantity	Title	Price (each)	Extension
	Environmental Engineering Unit Operations and Unit Processes Laboratory Manual (Ed.: O'Connor)	\$12.00*	
	Aquatic Microbiology Laboratory Manual (Cooper, et al)	\$ 7.00	
	Proceedings, Fourth Conference on Environmental Engineering Education (June 19-21, 1980, Univ. of Toronto)	\$15.00**	

**Subtotal**

\*Available to AEEP members for \$6.00 per copy.  
\*\*Available to AEEP members for \$10.00 per copy.  
Members of AEEP may order additional copies of these publications at membership rate for their students.

Texas residents add  
5% sales tax

Postage and handling  
(See Note above)

**Total Enclosed**

For special handling, please check:

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- \_\_\_\_\_ Foreign Mail, Book Rate
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- \_\_\_\_\_ United Parcel Service

Additional costs for these services will be billed to you.

**Application for Membership  
in the  
Association of Environmental Engineering  
Professors**

Name \_\_\_\_\_

Official Title \_\_\_\_\_ Dept. \_\_\_\_\_

Business Address \_\_\_\_\_ Tel. \_\_\_\_\_

Home Address \_\_\_\_\_ Tel. \_\_\_\_\_

Applying for: Membership Status  (indicate rank). Affiliate Status

**PLEASE ATTACH RESUME**

Dues are payable in the Association on a calendar year basis. The AEEP annual dues payment, prorated according to the date of application, is shown below:

**INITIAL DUES PAYMENT REQUIRED BASED  
ON RANK AND DATE OF APPLICATION**

RANK	1 Jan.	1 Apr.	1 July	1 Oct.
	31 Mar.	30 June	30 Sept.	31 Dec.
Professors	\$50.00	\$37.50	\$25.00	\$12.50
Associate Professors	25.00	18.75	12.50	6.25
Assistant Professors	25.00	18.75	12.50	6.25
Affiliate Member	10.00	7.50	5.00	2.50

Please return this form, along with your dues to:

Dr. C.P. Leslie Grady, Jr.  
School of Civil Engineering  
Purdue University  
W. LaFayette, IN 47907

Enclosed are my AEEP dues in the amount of: \$ \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

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