



Association Of
Environmental
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Professors

NEWSLETTER

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PRESIDENT'S CORNER

The morns are meeker than they were -
The nuts are getting brown -
The berry's cheek is plumper -
The Rose is out of town.

The Maple wears a gayer scarf -
The field a scarlet gown -
Lest I should be old fashioned
I'll put a trinket on.

- Emily Dickinson

The autumn colors cheered Dickinson and beckoned her many years ago to "put a trinket on." On December 5 and 6, 1963, at the LaSalle Hotel in Chicago, a small group of professors met to form the American Association of Professors in Sanitary Engineering (AAPSE). We are now nineteen years old. Along the way we changed our name to AEEP, but our primary goal has remained constant, to advance the field. AEEP is cheered to be sporting a new trinket - a new logo - on this occasion of the first *Special Issue* of the Newsletter. Each February we will be distributing the Newsletter to environmental engineering professional societies and organizations, EPA offices, and consulting engineering firms. Six hundred copies were sent to these new readers. On behalf of AEEP's 269 Members and 58 Affiliate Members, welcome.

I am honored to be President of AEEP for 1983. In this message I have taken on two tasks: one easy and pleasant, the other difficult. The easy task is to highlight AEEP's activities and accomplishments for 1982. Let me start by saying thanks, on behalf of AEEP, to Jon Lieberman, Don Lauria, and Ben Dysart. They leave the Board of Directors, but AEEP is better for their efforts. Fran DiGiano was President during 1982 and deserves much of the credit for AEEP's recent and future accomplishments. Fortunately Fran remains on the Board in the office of Past President. I shall seek Fran's advice during 1983 and call on him to assist us in several matters.

Now, what did AEEP do in 1982. To improve our teaching and knowledge of the field, AEEP sponsored two workshops. Brian Arbuckle did a laudable job in conducting the Purdue workshop on "Applying Chemical, Structural, and Thermodynamic Correlations to Treatment Process Selection." Phil Singer organized an ex-

cellent evening seminar at the AWWA conference on combined chlorination and THM control. The 1982 AEEP Distinguished Lecturer was Charles R. O'Melia. Two of his lectures were videotaped and are available for a modest rental fee - see details elsewhere in this Newsletter. Work was begun, under John O'Connor, to revise the laboratory manual on unit operations. Planning was started, under John Crittenden, for a new manual on computer software.

On May 25, 1982, Fran DeGiano testified before the Committee on Appropriations of the U.S. Senate. Fran expressed AEEP's concern about the proposed 1983 budget for EPA's extramural research program. Fran's testimony was published in the September 1982 issue of the Newsletter. Fran DiGiano and Nick Clesceri co-chaired the AEEP/NSF Conference, "Fundamental Research Needs for Water and Wastewater Systems" in Arlington, Virginia on December 1 and 2. The attendance was 150. The final conference proceedings should be available in the summer according to the editor, Mike Switzenbaum.

(continued on page 2)

Expanded Distribution of AEEP NEWSLETTER

Beginning with this issue, each February AEEP NEWSLETTER will be distributed to **personnel** outside the AEEP who are involved in Environmental Engineering. These include:

- Professional Societies
- Water Pollution Control Federation Member Associations and Affiliations
- U.S.E.P.A. Officials including Regional Offices
- Federal and Interstate Environmental Agencies
- National and International Associations Dealing with Environmental Agencies
- Selected Environmental Engineering Consulting Firms

It is hoped that the expanded distribution of the NEWSLETTER will give AEEP increased visibility and will allow the association to inform a wider audience of our activities and accomplishments. Anyone wishing to submit articles of general Environmental Engineering interest to future February issues should send the information to the NEWSLETTER editors by December 1 of each year.

Finally, AEEP has established the *Outstanding Publication Award*. The first award will be presented in October 1983 at the WPCF conference in Atlanta. Nominations are being solicited from the Awards Committee. Fran DiGiano proposed this award to the Board last January. I am proud that AEEP has established this award. It is AEEP's intent to acknowledge scholarly papers which have been valuable to us in our teaching. I have asked Fran DiGiano to make the first presentation.

Before I turn to my difficult task, what is in store for 1983? I would like to welcome and congratulate our three new Board members: John Crittenden, Mike Saunders, and Vern Snoeyink. I look forward to working with the new and returning board members. Congratulations are due Vern Snoeyink on his election to Vice President and to our new Secretary-Treasurer, Lee Christensen.

A new President must concern himself with the financial affairs of an organization. You will find published in this Newsletter a year ending financial statement. The year ending balance under the item, *Savings Account*, indicates \$15,877. This money is actually in a money market fund. Some members may question why we have so much money in savings. The fact is that over the last two years our expenses have exceeded our income by \$4,500, decreasing our savings by that amount. The interest in our savings (money market fund) has provided the funds for holding our Purdue workshop. We wish to continue this practice. An effort is being made to reduce our expenses for 1983.

This year's Purdue workshop is being organized by Des Lawler. The topic is "Particles and Particle Surfaces" and will be held on Monday, May 9. Put it on your calendar, it's a workshop you shouldn't miss. AEEP's 1983 Distinguished Lecturer is Professor Donald Mackay of the Department of Chemical Engineering and Applied Chemistry, University of Toronto. I am delighted with the selection. Professor Mackay was a lecturer at last year's Purdue workshop and did an excellent job.

Beginning in 1978 at the AWWA conference in Atlantic City, AEEP has sponsored an evening seminar. This year's seminar will be held at the conference in Las Vegas on Monday, June 6. The topic is "Corrosion and Corrosion Control," and is being organized by Gary Amy. More about this in the May Newsletter.

1984 Will be the twentieth anniversary of AEEP. As we approach this milestone I ask you:

- What does AEEP do well?
- What does AEEP do poorly?
- What new challenges should we undertake?

A professor should never have to answer his own questions. I am asking other professors, all of you, to answer these questions. After all, you are AEEP. I have requested the editors of the AEEP Newsletter to reserve space in future issues for *Views of the Members*.

James K. Edzwald

AEEP NEWS AND ANNOUNCEMENTS

New AEEP Board and Officers Elected

The AEEP general membership elected three new members to serve on the AEEP Board of Directors for the 1983 - 1986 three year term. They are:

- Michael Saunders, Assoc. Professor of Environmental Engineering, School of Civil Engineering, Georgia Institute of Technology
- John C. Crittendon, Assoc. Professor of Civil and Environmental Engineering and Adjunct Assoc. Professor of Chemical Engineering, Michigan Technology University
- Vernon L. Snoeyink, Professor of Environmental Engineering, Department of Civil Engineering, University of Illinois

At the January board meeting, new officers were elected. The new President, Vice President, and Secretary-Treasurer are James K. Edzwald, Vernon L. Snoeyink, and G. Lee Christensen.

Leaving the Board of Directors are Jon C. Liebman, Benjamin C. Dysart III, and Donald T. Lauria. Special thanks are extended to these individuals for their service. In addition, thanks are extended to Francis A. DiGiano, who served as President of AEEP during 1982. He will remain on the Board of Directors as Past-President.

New AEEP Logo

Previous readers of this issue of the Newsletter will notice the new logo on the front and back pages. This is actually a new symbol and logo-type approach for AEEP. This concept was designed by Mr. Joe King of Joe King and Associates, Charlotte, North Carolina, for AEEP.

Mr. King explained several of the points governing the context of the visual approach to the symbol as follows:

- "The visual explanation of your association should reflect environment and control of that environment. Therefore, the "AEEP" is contained in a field housed by a "controlling" element: the heavy border.
- The functions of your organization are multi-dimensional. This fact has been illustrated by means of the shadowed boundary containing the "AEEP" form. You will notice this boundary also takes on an optical "movement" that further illustrates the point.
- The letter form of "AEEP" is both analytical and technical, and in turn up-to-date with the philosophy and very nature of the technical demands placed upon you. And, of course, the ability to fulfill those demands."

Thanks are expressed to Mr. King for a well done job.

TREASURER'S REPORT

Financial Statement for 1982

Item	Total for Year Jan. 4, 1982
Balance Forward (Date)	
General Fund	4,184.88
Workshop Fund	0
NSF Fund	0
Publications Acct.	1,758.31
Savings Account	18,173.00
Total	24,116.19
Income	
General Fund	15,716.99
Workshop Fund	0
NSF Fund	30,842.00
Publications Acct.	1,512.21
Savings Account	2,704.00
Total	50,775.20
Expenses	
General Fund	20,501.56
Workshop Fund	0
NSF Fund	24,939.37
Publications Acct.	244.79
Savings Account	0
Total	45,685.72
Transfers	
General Fund	+5,000.00
Workshop Fund	0
NSF Fund	0
Publications Acct.	0
Savings Account	-5,000.00
Total	0
Ending Balance (Date)	Jan. 12, 1983
General Fund	4,400.31
Workshop Fund	0
NSF Fund	5,902.63
Publications Acct.	3,025.73
Savings Account	15,877.00
Total	29,205.67

Donald T. Lauria

Research Needs Conference Held

The *Fundamental Research Needs for Water and Wastewater Systems* Conference was held on December 1 and 2, 1982 at the Marriott Key Bridge Hotel in Arlington, Virginia, with over 150 attendees. This conference was organized by AEEP and supported by the *National Science Foundation* in cooperation with the Office of Research and Development of the *United States Environmental Protection Agency*.

The conference consisted of presented papers and discussions. Thanks are extended to Co-Chairmen, Francis A. DiGiano and Nicholas L. Clesceri; the Organizing Committee, which consisted of Edward H. Bryan, James K. Edzwald, John P. Lawler, Paul V. Roberts, William A. Rosenkranz, F. Michael Saunders

and the Co-Chairmen; and the Proceeding Editor, Michael S. Switzenbaum who was assisted by Peter M. Huck. Special appreciation is extended to the authors who presented their papers.

The final Proceedings of the Conference will be published in the summer of 1983.

A Brief Description of the AEEP

The AEEP is an all-volunteer organization which works to effectively represent Environmental Engineering academic programs and provide some activities and services to its 300-plus members. These include:

- *Policy statements* to the U.S. congress on legislation effecting environmental engineering programs
- *Register of Graduate Programs* providing a comprehensive listing of Environmental Engineering graduate programs
- *Workshops and seminars* on important new technology or teaching approaches and research needs to the profession
- *Enrollment survey* which includes numerical data on graduate enrollment trends in the profession
- *Teaching materials* such as the "Water Chemistry Laboratory Manual," "Environmental Engineering Unit Operations and Unit Processes Laboratory Manual," and "Aquatic Microbiology Laboratory Manual."
- *Membership Meetings* held at the WPCF annual meeting and the Purdue Industrial Waste Conference as well as special sessions at the AWWA annual meeting
- *Input of other organizations* including an AEEP delegation on the USANC for representation of the United States to the IAWPC and an elected member on the board of directors of the AAEE.
- *Research Awards* for doctoral dissertations in cooperation with Engineering Science and Nalco
- *Newsletter* published three times per year, and
- *Member involvement* in committee work

AEEP members are generally on the faculties of the educational and research programs that have produced, and are producing most of the Environmental Engineers in practice today. An application for AEEP membership is on the next to last page of this issue.

1983 AEEP Purdue Workshop: Particles and Particle Surfaces

For the past several years, AEEP has sponsored a one-day workshop at Purdue University on the day preceding the start of the Purdue Industrial Waste Conference. The purpose of these workshops is to make recent research findings more accessible to the membership of AEEP so that there is a shorter time lag and lesser knowledge gap between research in a certain area and its use in the classroom. The workshop will be held at Purdue (West Lafayette, Indiana) on May 9, 1983 and is free to AEEP members and students.

The topic of this year's workshop is "Particles and Particle Surfaces." The speakers and their topics are as follows:

- 1) James Morgan, professor of Environmental Engineering Science at the California Institute of Technology, will focus on chemical reactions at surfaces.
- 2) Egon Matijevic, professor of Chemistry and director of the Institute of Colloid and Surface Science at Clarkson College, will speak on surface/surface interactions with application to coagulation of two different types of particles (heterocoagulation), adhesion, and flotation.
- 3) Desmond Lawler, assistant professor of Civil Engineering at the University of Texas, will focus on the physical aspects of particle transport and particle interactions.

All speakers are expected to discuss existing models and experimental techniques related to their topics, and to use examples relevant to the transport of materials in the environment and to the attainment of treatment objectives. Notes prepared by each lecturer will be given out to all attendees.

The topic of the workshop and selection of speakers was made by the Education Committee of AEEP. Further organization is being handled by Desmond Lawler. Brochures and registration forms will be sent to all AEEP members in March. For further information, or to get a copy of the brochure if you are not an AEEP member, write to:

Desmond Lawler
Dept. of Civil Engineering, ECJ 8.6
Univ. of Texas
Austin, Texas 78712

Videotapes of 1982 Distinguished Lecturer Available

Dr. Charles R. O'Melia from the Department of Geography and Environmental Engineering at the Johns Hopkins University was the 1982 AEEP Distinguished Lecturer. Videotapes of two of his talks are available for a modest rental fee from the AEEP Publications Committee. The tapes are of the talks "Coagulation for Removal of Natural Organic Substances from Water Supplies" given at Miami University (Ohio) and "Aguasols: Physical Aspects of the Behavior of Small Particles in Aquatic Systems" given at the University of Texas. The former consists of two black-and-white tapes with a total time of approximately 75 minutes, while the latter is a single color tape with a time slightly less than one hour.

Either tape can be rented for one-week periods. They will be sent via first class mail no later than the Monday preceding the week of the desired rental, and should be mailed back no later than the Monday after the week of rental. The costs are as follows:

- i) For the "Coagulation..." tapes (2): \$10.00 per week for AEEP members; \$16.00 per week for others
- ii) For the "Aguasols..." tape: \$ 5.00 per week for AEEP members; \$10.00 per week for others
- iii) \$10.00 postage and handling fee per rental.

To make arrangements for rental of either of these tapes, contact:

Desmond Lawler
Dept. of Civil Engineering, ECJ 8.6
Univ. of Texas
Austin, Texas 78712
(Telephone: 512-471-5602)

AEEP Research Awards

AEEP is very fortunate to be able to recognize outstanding research activity through the annual presentation of three research awards. The following individuals were honored in the previous year.

1. *The Nalco Chemical Award for the Best Doctoral thesis on Chemical Research in the Area of Industrial Water and Wastewater Treatment of Combined Industrial/Municipal Water*—was presented to: Dr. Richard Walters for his dissertation "Relationships between Molecular and Physicochemical Properties of Polycyclic Aromatic Hydrocarbons and Adsorptive Behavior in Aqueous Systems." His advisor was Dr. Richary Luthy of the Dept. of Civil Engineering, Carnegie-Mellon University. Dr. Walters is presently an Assistant Professor at the University of Maryland, Department of Civil Engineering.
2. *Engineering Science, Inc./AEEP Award for the Best Doctoral thesis Relevant to Environmental Engineering Practice*—was presented to: Dr. Chia-Hwa J. Yang for his dissertation "The Effects of Cyanide and Chloroform Toxicity on Methane Fermentation." His advisor was Dr. Richard Speece of Drexel University.

Congratulations are extended to the students and their advisors.

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 1982-1983 academic year (dated June 1, 1982-May 31, 1983) 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, 1983. The judging panel for the award consists of Prof. Richard Speece, Drexel University, Chairman, Prof. David Jenkins, Univ. of California 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 WPCA 55th Annual Conference in Atlanta, October, 1983.

Nalco Chemical Award for the Best Doctoral Thesis on Chemical Research in the Area of Water and Wastewater Treatment

A award consisting of \$2,500 to be divided between the thesis author and his major professor (\$1,250 each) will be presented to the selected candidate at the 1983 American Water Works Association meeting, Las Vegas, Nevada.

This award is sponsored by Nalco Chemical Company under the auspices of the Association of Environmental Engineering Professors (AEEP) and is companion to a parallel award from Nalco on Industrial Water or Waste Treatment awarded at the AEEP meeting at the St. Louis WPCF meeting.

Doctoral theses completed over the past year (1/1/82 - 12/31/82) are eligible for submission for this award year. The research work must be related to the chemical aspects of water and 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 March 15, 1983. Winners will be notified by June 1, 1983. Send 2 copies of dissertation to:

Dr. Vernon L. Snoeyink
Dept. of Civil Engineering
University of Illinois
Urbana, IL 61801

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 1983 Water Pollution Control Federation meeting in Atlanta.

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 (6/1/82 - 5/31/83) 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, 1983. Winners will be notified by September 1, 1983. Send 2 copies of the dissertation to:

Dr. Richard Luthy
Dept. of Civil Engr.
Carnegie-Mellon University
Pittsburgh, PA 15210

AEEP Outstanding Publication Award

The AEEP Board has initiated the development of a new award. The "AEEP Outstanding Publication Award" will be presented annually at the WPCF Conference and will consist of a plaque to all authors and co-authors. All members are encouraged to submit nominations of papers which demonstrate significant educational contributions and research accomplishments which have "stood the test of time" and has been published at least five years ago. The best paper will be selected by the Awards Committee after all nominations are received. Nominations should be forwarded to the committee by April 1, 1983 at the following address:

Dr. Joseph H. Sherrard, Chairman
AEEP Awards Committee
Dept. of Civil Engineering
VPI&SU
Blacksburg, VA 24061

AEEP Distinguished Lecturer Series

Professor Donald Mackay of the Department of Chemical Engineering and Applied Chemistry, University of Toronto has been selected as the AEEP Distinguished Lecturer for the 1982-83 academic year. Professor Mackay is well known for his research in environmental modeling, especially in the use of fugacity. We are delighted that Professor Mackay has agreed to serve as this year's Distinguished Lecturer. A listing of the Universities selected for this year's series will be announced in the next AEEP NEWSLETTER. For further information contact:

Roger A. Minear
Chairman, Distinguished Lecturer Committee
University of Tennessee
Knoxville, TN 37996-2010
(615) 974-3320

AEEP Archives Project

The AEEP Archives Committee was created in 1974 by the AEEP Board. The charge was "to assemble in one location a record of AEEP activities including membership, legal papers, history of organization, bylaws, board of directors, members, etc." Much progress has been made in this endeavor. Categories of files currently compiled in the AEEP archives include:

Archives	Testimonies
History	Seminars
Board Minutes	Workshops
Open Meetings	Conferences on
Officers and	Graduate Education
Committee Membership	Grants
Committees	Newsletters
Reports	Financial Records
Liaisons	Publications

