



Association Of
Environmental
Engineering
Professors

NEWSLETTER

VOLUME 18, NO. 1

Published three times yearly by AEEP

FEBRUARY 1983

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 "Aqueous: 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 "Aqueous..." 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. Richard 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

The completion of the archives project makes the AEEP files functional for the organization and preserves its history. The latter is a subject rich in content and documents the important role of AEEP in advancing the profession of environmental engineering. For further information contact:

Dave Hendricks, Chairman of the Archives Committee
College of Engineering
Colorado State University
Ft. Collins, CO 80521
303-491-8723

Register of Environmental Engineering Graduate Programs Update

The next update of the Register of Environmental Engineering Graduate Programs will commence in the near future. Tentatively, a formal announcement and request for information will be mailed to all university programs in early 1983. Participants will be asked to return all requested information according to a standardized format and within three months of receipt of the formal announcement. This proposed scenario will permit publication and distribution of the next edition during 1984. Copies will also be available for interested nonacademic organizations (i.e., industry and government). For more information, contact:

Gary L. Amy
Department of Civil Engineering
University of Arizona
Tucson, AZ 85721
(602) 626-2266

Proceedings Available

Proceedings of the Fourth Conference on Environmental Engineering Education are now available for free to AEEP members. This conference was held on June 19-21, 1980 at the University of Toronto. To obtain a copy, contact:

Desmond F. Lawler
The University of Texas at Austin
Department of Civil Engineering ECJ8.6
Austin, TX 78712

Deadline for May 1983 NEWSLETTER

Anyone interested in submitting articles for the May, 1983 issue of the NEWSLETTER should do so no later than April 1, 1983. Articles should be mailed directly to the editors.

GENERAL NEWS

Sabbatical Leave Position

Dr. Menahem Rebhun, Professor of Environmental and Water Resources Engineering at the Technion Israel Institute of Technology is seeking a visiting appointment at a U.S. University or in a Research and Development Institute for his sabbatical year which will be either in 1983/84 or 1984/85. He would additionally consider an appointment longer than one year. Dr. Rebhun's expertise includes a number of Environmental Engineering subjects including: water quality, wastewater characterization and treatment, flocculation, artificial recharge and wastewater reclamation. Any institute seeking further information should contact:

Dr. M. Rebhun
Professor of Environment and Water Res. Engineering
Technion-Israel Institute of Technology
Haifa, ISRAEL

American Academy of Environmental Engineers Invites Inquires from AEEP Members

The American Academy of Environmental Engineers was founded in 1955 for the principal purpose of serving the public by improving the practice, elevating the standards and advancing public recognition of environmental engineering. The Academy is a non-profit organization, composed of over 2,100 registered professional engineers who have been recommended by their peers and certified by a Board of Trustees as Diplomates. Board certification is based upon approval of acceptable supporting credentials followed by successful completion of a written examination and/or an oral interview, as required by the Bylaws.

Following certification, each Diplomate receives a certificate of specialized qualification in one or more of the following fields of environmental engineering:

- Air Pollution Control Engineer
- Industrial Hygiene Engineer
- Radiation Protection Engineer
- Solid Waste Management Engineer
- Water Supply and Wastewater Engineer
- General Environmental Engineer

The basic requirements for certification include the following:

1. A baccalaureate degree in engineering or a related field acceptable to the Board, from an academic institution of recognized standing.
2. A valid certification of registration to practice professional engineering in the United States. A certificate from a foreign country may be acceptable.
3. Be professionally engaged in environmental engineering activities on a full-time basis.
4. Be a person of good moral character and of high ethical integrity and professional standing.

Certification can be obtained in three different ways depending on a person's years of experience and accomplishments:

1. *Written examination and oral interview,*
2. *Without examination by oral interview and accomplishments in a specialty, and*
3. *As a nominee of a sponsoring organization based on accomplishments—without examination and without oral interview.*

AEEP joined The Academy as a sponsor in 1977. Paul W. Purdom, Sr. served as the first AEEP representative on the Board of Trustees from 1977 to 1982. N. Bruce Hanes is the current representative serving from 1983 to 1986. In addition three current AEEP members, Paul W. Purdom, Sr. (1963-1964), Daniel A. Okun (1970), and George P. Hanna, Jr. (1982), have served as past presidents. Ernest F. Gloyna, another AEEP member, was just elected president for 1983. Thus, the membership of AEEP has been effectively involved over the years in the leadership of The Academy.

Any AEEP member who is a registered professional engineer and interested in joining or learning more about The Academy, should contact N. Bruce Hanes for further information and an application. His address is in the AEEP Directory, or call 617/381-3211.

Report of Trustees to AAEE From AEEP

The annual meeting of this Board of Trustees of AAEE was held in Annapolis, Maryland, October 21-22, 1982. P. W. Purdom, trustee, and Bruce Hanes, trustee designate, attended.

AAEE has been accepted as a Participating Body Member of ABET. Bruce Hanes has been appointed from AAEE to the ABET Board.

A seminar on "Development and Assessment of Environmental Standards" was held in December 1981. Proceedings of that seminar will be published shortly. This year 138 applications for certification were processed, including two recommended by AEEP. About 130 were certified.

The continued membership of AAEE in the American Association of Engineering Societies (AAES) was discussed in detail. The potential high cost of effectively participating in the AAES committee structure and the impact that AAEE members can make through such participation was evaluated. It was noted that AAEE is unique in that many of our sponsoring organizations are also members of AAES. It was felt that our sponsors could well represent our interests. The Board approved Academy withdrawal from AAES and directed that notice of withdrawal be sent to AAES.

Paul W. Purdom, Sr.
AEEP Trustee

WPCF Honors AEEP Member

Peter M. Huck, Associate Professor at the University of Alberta, Edmonton, was honored at the 55th Annual WPCF Conference in St. Louis as one of the recipients of the Willem Rudolfs medal. He was recognized for the paper "Data Base Development for the Design of a Radium-226 Removal Process" of which he was a co-author.

Congratulations are extended to Peter who is an AEEP member.

International Association of Great Lakes Research Honors Researchers

Three researchers from the Department of Civil and Environmental Engineering at Clarkson College were recently honored by the International Association for Great Lakes Research. Professor Joseph DePinto, Professor Thomas Young and Scott Martin, a Ph.D. candidate in the field of Environmental Science and Engineering, were presented the Chandler-Misener Award for an article based on their two years of research which focused on the ways of reducing phosphorous levels in parts of the Lower Great Lakes region, specifically Lake Ontario and Lake Erie. Their findings were written up in a paper entitled "Algal-Available Phosphorous in Suspended Sediments from Lower Great Lakes Tributaries," and appeared in the *Journal of Great Lakes Research* 1981.

Congratulations are extended to Tom and Joe who are AEEP members.

Housing for the AWWA Conference

The D.I. 500 motel is available for faculty and students attending the AWWA Conference in Las Vegas, June 5-9, 1983. The motel, part of the chain of Great Western Hotels, is adjacent to the Convention Center, and has air conditioned rooms, a pool, and reasonable rates (Sunday-Thursday: 1 bed - \$24, 2 beds - \$29; Friday-Saturday: 1 bed - \$31, 2 beds - \$36). This motel will not be listed on the AWWA housing list. Make reservations directly by calling (800) 634-6635.

SHORT COURSE ANNOUNCEMENTS

Waste Water Treatment Process Technology

A short course on wastewater treatment process technology will be offered in Montreal and Toronto from February 21-24, 1983. This continuing education course consists of four separate 1-day modules on biotechnology, physical-chemical technology I and II and sludge management. Participants can register for any number of modules.

For more information, contact Dr. N. W. Schmidtke.

TEKTRAN INTERNATIONAL Information & Education Inc.

178 Louisa St. Kitchener, Ontario, N2H 3M5.

tel. (519) 744-5931, telex 06 983 639 BTS-MSG.A.

Institute in Water Pollution Control

The 28th Institute in Water Pollution Control will be held at Manhattan College in May, 1983. Three courses will be offered.

1. **SECONDARY, TERTIARY AND TOXICS TREATMENT**
May 23rd to May 27th
Tuition: \$450.00
2. **MODELLING OF TOXIC SUBSTANCES IN NATURAL WATER SYSTEMS**
May 23rd to May 25th
Tuition: \$300.00
3. **QUALITY MODELS OF NATURAL WATER SYSTEMS**
May 26th and 27th Tuition: \$200.00

For further information, contact:

Kathryn King
Program Coordinator
ENVIRONMENTAL ENGINEERING & SCIENCE PROGRAM
MANHATTAN COLLEGE
BRONX, NEW YORK 10471
(212) 920-0277

Summer Continuing Education Program

A six-week continuing education 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. Four courses are to be offered in Summer 1983:

(a) Flotation & Related Adsorptive Bubble Separation Processes, July 11-13, or Aug. 1-3, fee \$250; (b) Design and Operation of Flotation Process, July 18-20, or Aug. 8-10, fee \$250; (c) Application of Flotation Process, July 25-27, or Aug. 15-17, fee \$250; (d) Research and Pilot Plant Operation, July 14-15, July 21-22, July 28-29, Aug. 4-5, Aug. 11-12, or Aug. 18-19; fee \$150 for each 2-day period. Reduced fees for registrations in more than one course.

For more information, please contact:

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

Environmental Program AIChE Diamond Jubilee Meeting American Institute of Chemical Engineers October 31 - November 4, 1983 WASHINGTON, D.C.

Source Control to Effects of Power
Generating Stations on Receiving Streams

Consistent with the reorganization of the Environmental Division of AIChE, all aspects of the environment and pollution in relation to power generating stations will be considered. Topics should deal with source control; recycle, reuse, and recovery; treatment, or effects of power generating stations on receiving streams. Papers involving either nuclear, coal, or fossil fuel power generating stations are encouraged. Treatment aspects involving such topics as boiler feed water treatment (both internal and external treatment), cooling water treatment, clarification, hot lime softening, ion exchange, filtration, demineralization, corrosion inhibition and control phosphate programs, amine programs, chelation, deaeration, microbiological control, blowdown, etc., are also encouraged. For further information contact:

Robert W. Peters
Environmental Engineering
School of Civil Engineering
Purdue University
West Lafayette, IN 47907
(317) 494-2191

Recovery of Metal Values from Industrial Wastes

American Institute of Chemical
Engineers
1983 Summer National Meeting
(to be held in conjunction with the
International
Solvent Extraction Conference)

Fairmont Hotel and Brown Palace
Denver, Colorado
August 28-31, 1983

Papers are invited in the area of metals recovery from industrial wastes. Waste management must extend beyond treatments which produce an effluent satisfying the existing standards. Papers dealing with recycle, reuse and recovery along with modification of existing processes and development of new treatment technologies which produce smaller quantities of waste materials will be emphasized. Topics related to fundamental principles involved in the subject area will also be considered.

Interested authors are requested to submit an abstract of about 200 words and a "proposal to present" form (available upon request from Assistant Secretary (Meetings), AIChE, 345 E. 47th Street, New York, NY 10017) by January 15, 1983.

Please send abstract to:

Professor H.Y. Sohn
Dept. of Metallurgy and
Metallurgical Engineering
University of Utah
Salt Lake City, UT 84112-1183
Tel. (801) 581-5491

or Professor C.N. Haas
Dept. of Environmental
Engineering
Illinois Institute of
Technology
Chicago, IL 60616
Tel. (312) 567-3537

New Environmental Control Techniques From Mineral Processing Industries

American Institute of Chemical Engineers 1983 Summer National Meeting (To be held in conjunction with the International Solvent Extraction Conference)

Fairmont & Brown Palace Hotels
Denver, Colorado
August 28 - 31, 1983

Papers are invited in the area of new waste control methods in the mineral industries or research leading to improved, cost effective systems. Novel environmental control techniques and strategies relating to the mineral processing industries will be addressed. These techniques include: flotation, reverse osmosis/ultrafiltration, filtration, coagulation, precipitation, electrofiltration, ion exchange, hydrometallurgical separation, foam and bubble separation, column crystallization, antisolvent induced agglomerations, chelation, etc. Authors are requested to submit an abstract of 200-300 words by February 1, 1983.

Please send abstract to:

Dr. Donald A. Dahlstrom
Eimco Process Equipment Co.
P. O. Box 300
Salt Lake City, Utah 84110

or Dr. Robert H. Gesumaria, P.E.
Lachel Hansen & Associates, Inc.
P.O. Box 5266
Golden, Colorado 80401

University of Vermont 1983 George D. Aiken Lecture Series

A technical symposium on Acid Rain Transport and Transformation Phenomenon will be held as part of the George D. Aiken Lectures for 1983 at the University of Vermont in Burlington, Vermont, September 21-23, 1983. Topics include:

- Atmospheric Transport,
- Contaminant Transformations in Atmospheric and Aquatic Systems, and
- Contaminant Transport in Aquatic Systems.

Abstracts should be submitted no later than May 1, 1983 to one of the following:

Dr. E. Alan Cassell
School of Natural Resources
335 Aiken Center
University of Vermont
Burlington, VT 05405

or Dr. David R. Hemenway
Dept. of Civil/Mech. Eng.
111 Votey Bldg.
University of Vermont
Burlington, VT 05405

For further information call E. A. Cassell (802) 656-4280 or D. R. Hemenway (802) 656-3800.

Environmental/Pharmaceutical Program AIChE Summer National Meeting American Institute of Chemical Engineers August 28th thru 31st, 1983

Denver, CO

Papers are being solicited for the session
Environmental Regulations and Their
Impact on the Pharmaceutical Industry

Papers are being sought relating to the impact of environmental regulations on the pharmaceutical industry. Topics should deal with source control, recycle, reuse and recovery treatment as well as regulatory issue unique to certain geographical areas such as Puerto Rico, New Jersey, and Colorado. Economic analyses of these impacts are encouraged.

Inquiries and submissions should be directed to:

Charles V. Flemming
Schering Corporation
1011 Morris Avenue
Union, NJ 07083
(201) 558-5444

Water Pollution Control Federation Conference

"Historical Perspectives on Water Pollution Control," will comprise a poignant new session topic for the 1983 Annual Water Pollution Control Federation Conference (Atlanta, Georgia; 2-7 October 1983). Intended as a thought-provoking forum for retrospective insights, prospective speakers are now being sought on all relevant water and wastewater issues. Inquiries and/or WPCF-format abstracts should be directed before 1 March 1983 to:

James E. Alleman
Environmental Engineering
School of Civil Engineering
Purdue University
West Lafayette, IN 47907
(317) 494-7705

WELCOME TO NEW AEEP MEMBERS

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Civil & Environmental
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Piscataway, NJ 08854
(201) 932-4414

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(716) 636-2741

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(314) 882-3678

Dr. Yakir Hasit
Civil Engineering and
Environmental Studies Institute
Drexel University
Philadelphia, PA 19104
(215) 895-2281

Dr. Mitchell J. Small
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Pittsburgh, PA 15213
(412) 578-8782

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Environmental
Sciences
University of Central Florida
Orlando, FL 32816
(305) 275-2388

Dr. T. Viraraghavan
Faculty of Engineering
University of Regina
Regina, Saskatchewan
CANADA S4S 0A2
(306) 584-4094

Dr. Hector R. Fuentes
Metallurgical & Environmental
Engineering
New Mexico Institute of Mining
&
Technology
Socorro, NM 87801
(505) 835-5129

Dr. Donald MacKay
Chemical Engineering
University of Toronto
Toronto, Ontario
CANADA M5S 1A4
(416) 978-4019

1983 Triangle Conference on Environmental Technology

Carolina Inn, Chapel Hill, North Carolina
April 5-7, 1983

The 1983 Triangle Conference on Environmental Technology is the 21st in a series designed as a forum for exchanging new ideas on environmental technology. An area featured in this year's conference will be ground water pollution.

Sponsors and Planning Committee

Duke University, Department of Civil and Environmental Engineering, Durham, NC; P. Aarne Vesilind North Carolina State University, Department of Civil Engineering, Raleigh, NC; Charles Smallwood Host Institution for 1983:

University of North Carolina at Chapel Hill, Department of Environmental Sciences and Engineering, Chapel Hill, NC; James C. Lamb, III.

For further information, please contact:

Judith K. Carter
Program Assistant
Office of Continuing Education
UNC-CH School of Public Health
Chapel Hill, NC 27514
(919) 966-4032

International Assn. on Water Pollution Research and Control

The International Association on Water Pollution Research & Control wishes to announce the following specialized conferences.

- SYMPOSIUM ON INTEGRATION OF ECOLOGICAL ASPECTS IN COASTAL ENGINEERING PROJECTS, Rotterdam, The Netherlands, 6-10 June 1983; the aim of the symposium is to study the execution of large hydraulic engineering projects in areas of environmental importance. For further information contact Secretariat, Symposium Integration of Ecological Aspects in Coastal Engineering Projects, P.O. Box 177, 2600 MH Delft, The Netherlands.
- THIRD INTERNATIONAL SYMPOSIUM ON ANAEROBIC DIGESTION, Boston, Massachusetts, USA, 14-20 August 1983. Contact Mr. R. L. Wentworth, Symposium Chairman, Third International Symposium on Anaerobic Digestion, 99 Erie Street, Cambridge, MA 02139 for additional information. Candidate poster presentations are solicited.
- DESIGN AND OPERATION OF LARGE WASTEWATER TREATMENT PLANTS, Vienna, Austria, 19-23 September 1983. The purpose of the workshop is to provide a forum for the exchange of practical experience and ideas regarding selected topics on the interaction between design and operation of large treatment plants. Contact Prof.-Dr.-Ing. W.v.d.Emde, Chairman, Organizing Committee, Institut für Wassergüte und Landschaftswasserbau, TU Wien, Karlsplatz 13, A-1040 WIEN, Austria for additional information. Registration deadline is 15 June 1983. Abstracts of proposed papers are due 15 February 1983.

- **ENERGY SAVINGS IN WATER POLLUTION CONTROL**, Paris, France, 26-28 September 1983; abstract for papers must be submitted by November 15, 1982 to A.G.H.T.M. (M. BRES), 9 Rue de Phalsbourg, 75854 PARIS CEDEX 17, France.
- **ROTATING BIOLOGICAL DISCS**, Stuttgart, West Germany, 6-8 October 1983. This international seminar intends to present up-to-date knowledge on biodisc process, to demonstrate its possibilities and limitations. Authors are invited to send abstracts (250-500 words) by 31 October 1982 to Prof. Dr.-Ing. Kh. Krauth, Institut für Siedlingwasserbau, Wasserguteund Abfalwirtschaft det Universtat Stuttgart, Bandtale 1, D-7000 Stuttgart 80, West Germany.
- **ARCTIC WATER POLLUTION RESEARCH, APPLICATIONS OF SCIENCE AND TECHNOLOGY**, Yellowknife, Canada, April 1984. Contact Dr. W. A. Bridgeo, Bridco Values Ltd., P.O. Box 3131, Halifax South Post Office, Halifax, Nova Scotia B3J 3HR, Canada, for further information.
- **THIRD INTERNATIONAL CONFERENCE ON URBAN STORM DRAINAGE**, Chalmers, University of Technology, Goteborg, Sweden, 4-8 June 1984; authors or intending participants should contact Per-Arne Malmqvist, Conference Secretary, Chalmers University of Technology, S-412 96 Goteborg, Sweden. Extended abstracts are due 15 September 1983.

ACADEMIC MARKETPLACE

School: Illinois Institute of Technology
Position: Two tenure track positions, rank open. One (reopened search) in water and wastewater engineering. One in air resources engineering.
Qualifications: Earned doctorate in environmental engineering or appropriate field.
Responsibilities: Research, graduate and undergraduate teaching.
Contact: Dr. Charles N. Haas, Search Committee Chairman, Pritzker Department of Environmental Engineering, Illinois Institute of Technology, Chicago, IL 60616

School: Department of Civil Engineering and Research Institute at Iowa State University
Position: 1) Water Resources Engineer
 2) Sanitary Engineer
Qualifications: 1) Undergraduate education in Civil Engineering or Engineering Mechanics with Ph.D. and research interest and accomplishments in quantity aspects of water resources.
 2) Undergraduate education in Civil or Chemical Engineering with Ph.D. in Environmental or Sanitary Engineering with major emphasis in biological aspects of wastewater treatment. Minor work should be in biochemistry and microbiology.

Responsibilities: Research, graduate and undergraduate teaching.
Application
Deadline: Immediate.
Contact: Dr. Carl E. Ekberg, Jr., Head, Department of Civil Engineering, 390 Town Engineering Bldg., Iowa State University, Ames, Iowa 50011

School: Department of Geography and Environmental Engineering at The Johns Hopkins University.
Position: Tenure track Assistant or Associate Professor in Environmental Engineering.

Qualifications: Candidates should have research interests in biological or chemical processes in water and wastewater treatment systems and in natural waters.

Responsibilities: Participation in and supervision of research and graduate and undergraduate teaching.

Application
Deadline: Immediate.
Contact: Professor M. Gordon Wolman, Department of Geography & Environmental Engineering, The Johns Hopkins University, Baltimore, Maryland 21218

School: Cleveland State University
Position: Assistant Professor in Civil Engineering (Sanitary/Environmental Engineering)

Qualifications: Ph.D. or equivalent, teaching and research interest in air pollution control

Responsibilities: Research, graduate and undergraduate instruction

Application
Deadline: Selection for the position begins immediately and applications will be accepted until the position is filled.

Contact: Send resume, transcripts and the names of three references to: Dr. John H. Hemann, Chairman, Department of Civil Engineering, Cleveland State University, Cleveland, Ohio 44115, Tel. (216) 687-2401

School: University of California, LA
Position: Assistant Professor, tenure track
Qualifications: A background and strong interest in water quality control systems. An earned Ph.D. is also required.

Responsibilities: Undergraduate and graduate teaching as well as research in the area of water quality control.

(continued on page 12)

Application
Deadline: Immediate.
Contact: Dr. Michael K. Stenstrom, Search
 Committee Chairman, 7619 Boelter
 Hall, University of California, Los
 Angeles, California 90024

School: University of Kansas, Civil
 Engineering Department
Position: Tenure track position at the
 Assistant or Associate Professor
 level.

Qualifications: Applicants must have a Ph.D. or D.E.
 or equivalent experience. Prior
 university-level teaching
 experience and a BSCE from
 ABET/ECPD accredited curriculum
 desirable.

Responsibilities: Teaching undergraduate and
 graduate courses and conducting
 research in environmental health
 engineering.

Application
Deadline: Immediate.
Contact: Dr. Stanley T. Rolfe, Chairman, Civil
 Engineering Department, University
 of Kansas, Lawrence, Kansas 66045

School: Montana College of Mineral Science
 and Technology

Position: Air Pollution Control Engineer

Qualifications: Ph.D. required, prior experience in
 academic or research program
 preferred

Responsibilities: undergraduate and graduate
 teaching, research and student
 advising

Contact: Roy H. Turley, Vice President for
 Academic Affairs, Montana Tech,
 Butte, MT 59701, 406-496-4128

APPLICATION FOR MEMBERSHIP in the Association of Environmental Engineering Professors

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Official Title _____ Dept. _____

Business Address _____ Tel. _____

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Applying for: Membership Status (indicated 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
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 Environmental Systems Engineering
 Clemson University
 Clemson, SC 29631

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