



Association Of  
Environmental  
Engineering  
Professors

# NEWSLETTER

VOLUME 19, NO. 1

Published three times yearly by AEEP

MARCH 1984

## DEDICATION

### Dr. Gerard A. Rohlich

Dr. Gerard A. Rohlich, an international authority on water resources and water management at the University of Texas and longtime member of AEEP died September 16, 1983. He was 73.

The Brooklyn, New York native was a professor in the Department of Civil Engineering and in the Lyndon B. Johnson School of Public Affairs. He joined UT faculty in 1972 as the C.W. "Tex" Cook Professor of Environmental Engineering after teaching 26 years at the University of Wisconsin at Madison where he received his second B.S., M.S. and Ph.D. degrees in civil engineering.

Dr. Rohlich, a member of the National Academy of Engineering had spent a lifetime in teaching and research directed at the control of environmental pollution.

His special fields of research included industrial wastes, water supply problems, and lake and stream pollution. His proteges hold positions of leadership in major universities, governmental agencies, industry and private practice. He published over 55 professional articles. He had a national and international reputation for his work in water resources and water quality management and specialization in industrial wastes and problems of water supply and lake and stream pollution, holding many assignments in Asia and South America as consultant to the United Nations, the World Health Organization, the Pan American Health Organization and the World Bank.

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## PRESIDENT'S CORNER

1984 is the twentieth year that AEEP and its predecessor, the American Association of Professors in Sanitary Engineering (AAPSE) has been in existence. It was founded to strengthen and advance the field of environmental (sanitary) engineering through the cooperative efforts of its members. Its major activities initially involved issues related to the Training Grant Program of the Environmental Protection Agency and its predecessor organization, as well as issues related to environmental engineering curricula. The Training Grant Program is essentially non-existent now, but other education and research issues confront the profession today that make it just as important to maintain AEEP as a viable organization. The organization has grown to a membership of over 250, and because this a relatively small number, the organization's viability depends upon the active participation of a large percentage of its members.

We are indeed fortunate in having a large number of AEEP members who are willing to work for the good of our profession. Fran DiGiano, Bruce Hanes, Dick Speece, and Bob Thomann have just finished their terms on the Board of Directors and we thank them for their efforts on our behalf. Jim Edzwald served us well as president and will continue as a member of the Board for another year. John Andrews, Bill Batchelor and David Jenkins joined the Board in January for three-year terms. Both John and David have served on the Board in the past, so we look to them to provide continuity with past activities. We also are fortunate in having many committee chairmen and members who work hard for our profession.

The issue of finances is an important one for AEEP. In the past few years, expenses have escalated and reserves have slowly diminished. The Board has decided not to increase dues, except for the affiliate membership dues which are being increased to cover current mailing and related expense. In order to maintain and possibly increase services, we are instituting a policy of having certain activities such as the Purdue Workshop be self-supporting. Such a policy should release funds for other projects such as the development of manuals which need front-end financing.

In the coming year AEEP will continue its sponsorship of workshops, the lecture tour, manual development for unit operations and computer software, awards, and other projects that have been so successful in the past. David Jenkins has planned an excellent Purdue Workshop on the microbiology of wastewater treatment, and Appiah Amirtharajah has organized a strong research seminar on flocculation for the Dallas AWWA meeting. We also want to make a special effort this year to keep you informed about proposed legislative actions and governmental policies that will impact our

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## DEDICATION

Among the many awards Dr. Rohlich received were the 1980 Gordon Maskew Fair Medal given by the Water Pollution Control Federation for his exemplary demonstration of proficient accomplishment in the training and development of engineers in the environmental field, the Karl Emil Hilgard Hydraulic Prize from the American Society of Civil Engineers, the Harrison Prescott Eddy Medal given for noteworthy research by the Water Pollution Control Federation, and the Fuller Award of the American Water Works Association. Dr. Rohlich is listed in Who's Who in America, American Men of Science and Who's Who in Engineering.

A scholarship fund has been established in the Civil Engineering Department at The University of Texas at Austin in memory of Dr. Rohlich.

☆ Acknowledgement ☆

AEEP thanks Professor Joseph Malina for preparing this dedication.

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## PRESIDENT'S CORNER

profession so that you can express your opinions about these to appropriate officials. Further, in an effort to keep you informed of opportunities for research funding, the Board is working to establish a research session or forum at future WPCF and AWWA meetings. Representatives of various funding agencies would be asked to present information on their programs, and attendees at these conferences, would be able to obtain up-to-date information on the agencies' plans through listening to their presentations and by asking questions. If you have ideas or questions about these or other AEEP activities, please let one of the Board members know.

Vernon L. Snoeyink  
President

## 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: John Andrews (Rice University), Bill Batchelor (Texas A&M University) and David Jenkins (University of California, Berkeley). John is a charter member of AEEP and has served AEEP in several capacities including being on the Board of Directors (1967-70), Chairman of the Workshop Committee (1968-69), Chairman of the Nashville and Myrtle Beach Workshops in 1968 and 1969, Chairman of the Foreign Lecturers Committee (1972), and Chairman of the first AEEP-NSF Workshop in 1977. Bill's honors include receiving The Standard Oil of Indiana Fellowship in Environmental Engineering (1971-1973), the AEEP Engineering Science Award for the best dissertation relevant to environmental engineering practice (1977), and the Harrison Prescott Eddy Medal of the Water Pollution Control Federation (1983). David was previously an AEEP Board member (1970-1973),

and has twice received the AEEP Engineering Science Award for Ph.D. Thesis supervisor. He is the co-author of 3 texts ... "Water Chemistry" with Professor V. L. Snoeyink; "Water Chemistry Laboratory Manual" with Professor V. L. Snoeyink, J. F. Ferguson, and J. O. Leckie; and, "Aquatic Microbiology Manual" with Professor L. Y. Young, and R. C. Cooper.

At the January board meeting, new officers were elected. The new President, and Vice President are Vernon L. Snoeyink, and F. Michael Saunders. G. Lee Christensen will continue as Secretary-Treasurer. Leaving the Board of Directors are Francis A. DiGiano, Robert V. Thomann, Richard E. Speece, and N. Bruce Hanes. Special thanks are extended to these individuals for their service. In addition, thanks are extended to James K. Edzwald, who served as President of AEEP during 1983. He will remain on the Board of Directors as Past-President.

## Expanded Distribution of AEEP NEWSLETTER

Once again the NEWSLETTER'S first issue of the new year is being distributed to personnel outside the AEEP who are involved in environmental issues. 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 issues should send the information to the NEWSLETTER editors.

## Treasurer's Report

### Financial Statement for 1982

#### INCOME

Dues	\$10,930.
Publications	1,577.
Interest	1,624.
Mailing Labels	295.
<b>TOTAL</b>	<b>\$14,426.</b>

#### EXPENSES

Office	\$ 1,888.
Newsletter	1,873.
Publications	1,975.
Board Meetings	2,950.
Purdue Workshop	3,525.
Committees	557.
USANC Dues	500.
Awards	497.
Miscellaneous	782.
<b>TOTAL</b>	<b>\$14,547.</b>

This statement does not include several break-even activities such as the NSF Research Needs Conference and the annual Distinguished Lecture Program. This listing is also a little misleading in that the organization's total worth has been dropping between \$500 and \$100 per year over the last 3 years. The organization's savings account currently holds \$15,000 which is approximately one year's budget. Anyone seeking further details of the Secretary-Treasurer's Jan. 12, 1984 report, should contact Lee Christensen at Villanova University.

## Dues Reminder

If you have not already done so, please send your dues to:

G. Lee Christensen  
Civil Engineering Department  
Villanova University  
Villanova, PA 19085

The payment schedule is:

Professor	US \$50.
Associate Professor	US \$25.
Assistant Professor	US \$25.
Affiliate Member	US \$10.

## AEEP - AWWA Seminar Program

The AEEP Seminar at the Annual AWWA Conference in Dallas, Texas is scheduled for Monday, June 11, at 8:00 p.m. The topic is RECENT IDEAS IN FLOCCULATION. The program is as follows:

1. Fundamentals of Particle Aggregation - R. D. Letterman
2. Flocculation Energy Parameters as a Function of Particle Size - J. L. Cleasby
3. Particle Detachment in Turbulent Fields - A. Amiratharajah

For further information, contact A. Amiratharajah, who is this year's chairman.

A. Amiratharajah  
Dept. of Civil Engrg. & Engrg. Mechanics  
Montana State University  
Bozeman, MT 59717  
(406) 994-6129

## 1984 AEEP Workshop at Purdue

In what is now becoming a tradition as a service to the academic community in Environmental Engineering, AEEP announces that the 1984 Workshop at Purdue will be on "Topics in the Applied Microbiology of Wastewater Treatment Processes". The Workshop will be on Monday, May 7, 1984, the day just prior to the Industrial Waste Conference at Purdue University, West Lafayette, IN.

Details of the program are as follows:

- Professor C. P. L. Grady of Clemson University, will talk on "Microbiological Growth Models Appropriate for Wastewater Treatment Processes" and on "The Measurement and Microbiological Basis for Biodegradability".
- Professor W. G. Characklis will speak about "Bio-flocculation, Microbial Aggregation and Attachment as Applied to Flocs and Films in Waste Treatment Processes".
- Professor R. H. Mah will be with us from UCLA to lecture on "The Microbiology of Methanogenesis".
- Professor David Jenkins from the University of California at Berkeley will discuss "The Microbiology of Activated Sludge with Special Reference to Filamentous Organisms and Activated Sludge Separation Problems".

Comprehensive lecture notes will be provided to all attendees. The registration fee is \$25 for AEEP members; \$50 for non-AEEP members; and \$10 for students. AEEP members will be receiving brochures and registration forms in March from the Purdue Conference Center. Non-members can obtain additional information from Professor David Jenkins, 11 Yale Circle, Kensington, CA. 94708, (415) 642-5337.

## 1984 AEEP Distinguished Lecturer Tour

Professor Perry L. McCarty, Silas H. Palmer Professor and Chairman of the Department of Civil Engineering at Stanford University was this year's AEEP Distinguished Lecturer. His tour included the following universities: Central Florida, Georgia Tech., Houston, Arizona, Illinois-Urbana, Michigan, Toronto, Alberta, Johns Hopkins, Drexel, Princeton, and Manhattan. The enormous response to the 1984 lecturer (39 requests in all) made the tour selection very difficult. Universities not selected for this year's tour are encouraged to try again next year, as preference is given to schools that support the program with repeated requests.

## AEEP Outstanding Publication Award

Nominations are solicited for the 2nd annual AEEP Outstanding Publication Award to be presented at the WPCF Conference held in New Orleans, LA in 1984. All members are encouraged to submit nominations of papers which demonstrate significant educational contributions and research accomplishments that have "stood the test of time." This year's award was won by J. M. Morgan and Werner Stumm for their publication entitled "Chemical Aspects of Coagulation." The best paper will be selected by the Awards Committee after all nominations have been received. Nominations should be forwarded to the committee by April 10, 1984 at the following address:

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

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

The 1983 Engineering Science, Inc./AEEP Award for the best doctoral thesis relevant to Environmental Engineering Practice was given to Dr. Edward J. Bouwer and his advisor, Professor Perry L. McCarty for their work on "Transformation of Trace Halogenated Organic Compounds in Biofilms." Shown below is Dr. Davis Ford, Division Vice President of Engineering Science, Inc. (center) presenting the award to Dr. Bouwer (left) and Dr. McCarty (right) at the Water Pollution Control Federation conference which was held in Houston on October 2-6, 1983.



AEEP members are invited to submit Ph.D. theses completed under their supervision during the 1983-1984 academic year (dated June 1, 1983 - May 31, 1984) 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 director. 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 91106, prior to June 15, 1984. 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 56th Annual Conference in New Orleans, LA, October, 1984.

## AEEP Register of Environmental Engineering Graduate Programs

The next edition of the AEEP Register of Environmental Engineering Graduate Programs is presently being readied for printing. Contributions from a total of 101 programs will appear in the next Register. Tentatively, publication of the 627-page Register is scheduled for February, 1984 with initial distribution of free copies to contributing programs during March. Additional copies will be available to interested parties at a nominal cost. Please see the next AEEP Newsletter for final details. For further information contact:

Gary L. Amy  
The University of Arizona  
Dept. of Civil Engineering and Engrg. Mech.  
Tucson, Arizona 85721  
(602) 621-2266

## AEEP Findings of 1982-83 Graduate Student Enrollment Survey

The results of the 1982-1983 Survey have been tabulated and point to several interesting conclusions. The data collected in the fall and early spring of last year were obtained in a questionnaire mailed to 154 representatives in environmental engineering programs throughout the country. The process was identical to previous AEEP Enrollment Surveys. By early April, 1983, 75 enrollment questionnaires had been completed and returned to the Committee. Thirteen follow-up telephone interviews resulted in a total of 88 programs being included in this year's data pool.

The graduate programs surveyed in this study are all associated with academic engineering departments and include environmental sciences and environmental management students in engineering programs where options are open to students without undergraduate engineering degrees. This study thus enumerates those graduate students who are being trained in the technical and quantitative aspects of environmental studies, but does not include those students enrolled in environmental sciences programs offered by such academic departments as biology, life sciences, geology or forestry. The objective is to provide a measure of the number of technically trained students available for employment in consulting engineering firms, private industry and governmental agencies.

The results are organized here to stimulate discussion among AEEP members and others interested in graduate student enrollment in environmental engineering; note Exhibits 1 and 2. A major goal of this report is to present information in a manner consistent with previous AEEP Surveys and thus encourage useful analysis of enrollment trends.

Six conclusions are suggested from the total base of information collected last year:

- Full-time environmental sciences and engineering enrollments are holding constant.
- The number of full-time students in water and wastewater may have reached a low plateau. After decreasing for several years, this enrollment has changed little and an earlier downward trend may not be continuing.
- Part-time enrollment in water and wastewater engineering has decreased drastically. The 691 part-time students identified last year, are far fewer than the previous low enrollment of 966 in 1981, and also lower than the 1017 identified in 1980.
- New students are pursuing research areas in proportion to previous enrollment trends, and water and wastewater engineering dominates. Almost half all students enrolled focus on water and wastewater engineering. Water resources and environmental sciences are areas receiving some students  $\approx 20\%$  @, while other areas, including air and solid/hazardous waste, are studied by only a small number of students,  $< 5\%$ .
- The overriding majority of students in environmental sciences and engineering are U.S. Nationals. Last year, 66% of all students held U.S. Citizenship. This year, the percentage is 72%.

Exhibit 1. NEW FULL-TIME GRADUATE STUDENT ENROLLMENT  
(adjusted to 1976 Baseline)

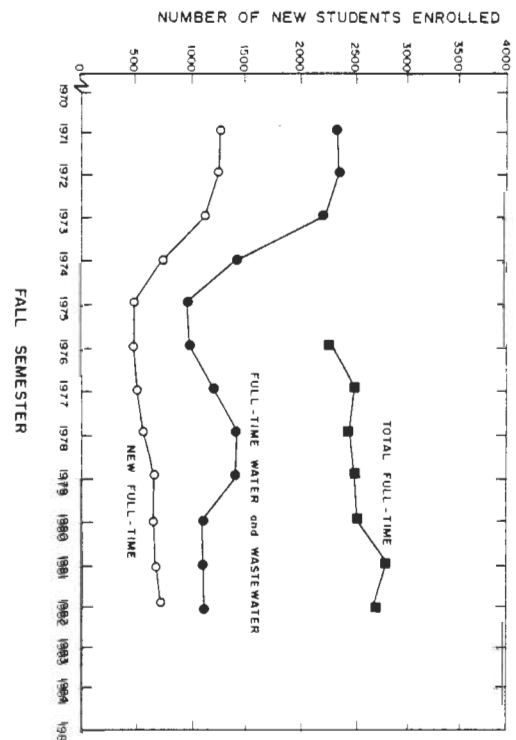
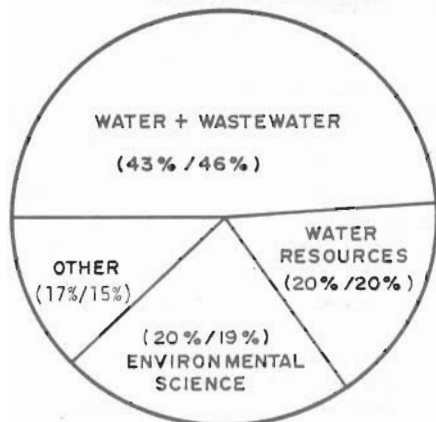




Exhibit 2. RESEARCH AREAS OF GRADUATE STUDENTS  
(All Students/New Students)



## AEEP/NSF Conference Proceedings

Publication of the Proceedings of the AEEP/NSF Conference Fundamental Research Needs for Water and Wastewater Systems has been delayed due to unexpected circumstances beyond the control of the Editor. The document, however, is now being printed and will be mailed to all AEEP members in late March.

## Deadline for September 1984 NEWSLETTER

Anyone interested in submitting articles for the September 1984 issue of the NEWSLETTER should do so no later than July 1, 1984. Articles should be mailed directly to the editors.

## General AEEP Announcements

Dr. Archie J. McDonnell, Professor of Civil Engineering at The Pennsylvania State University, has been appointed the Director of the Institute for Research on Land and Water Resources at that University. This appointment became effective May 1, 1983.

## Thesis Titles to be Published

A listing of thesis titles for theses completed during the 1982-83 academic year will be published as a separate publication by AEEP later this spring. The information required for this listing is as follows: title, author, degree, paper length, date, university and faculty advisor(s). Theses should be placed into one of the following categories: air pollution, groundwater, non-point source pollution, rivers, estuaries and lakes, solid wastes, water and wastewater treatment, instrumental methods of analysis, land treatment, sludge management, and miscellaneous. This information should be sent, no later than April 1, 1984, to:

J. Jeffry Pierce  
Dept. of Civil Engineering  
Duke University  
Durham, NC 27706  
(919) 684-2434

# GENERAL NEWS

## USANC Annual Report

As senior AEEP delegate and USANC Chairman, Fred Pohland recently submitted the 1983 USA National Committee annual report covering the period December 1982 - December 1983. Some of the highlights of the report are:

- The USANC continues to be sponsored by the AEEP, ACS, AIChE, ASCE and WPCF.
- The 12th Biennial Conference of IAWPRC is scheduled for Amsterdam, The Netherlands, Sept. 17-20, 1984.
- USANC has applied for a grant from the USEPA to prepare a comprehensive analysis on developments at the Amsterdam conference.
- Officers of USANC are: F. G. Pohland (AEEP), Chairman; R. S. Engelbrecht (WPCF), Vice Chairman; and R. A. Conway (ASCE), Secretary-Treasurer. These individuals and D. G. Stephan (AIChE) serve on the IAWPRC Governing Board. R. S. Engelbrecht also serves as IAWPRC President.
- Additional conferences, workshops, symposia and seminars are scheduled.

For further information on USANC activities contact:

Frederick G. Pohland  
USANC Chairman  
School of Engineering  
Georgia Institute of Technology  
Atlanta, Georgia 30332  
(404) 894-2265

## AAEE Certification

The Association of Environmental Engineering Professors is a sponsoring organization of the American Academy of Environmental Engineers (AAEE). Each sponsoring organization of the Academy may submit a list of not more than five (5) of its qualified members for consideration by the AAEE Board for certification.

The candidates must meet the following AAEE criteria:

1. BS in engineering or a related field
2. Professional engineer's license.
3. Professionally engaged on a full-time basis.
4. Must have at least fifteen (15) years of environmental engineering experience in one or more of the specialty fields. Eleven (11) of the fifteen (15) years shall be in responsible charge, which work must include active participation with responsibility primarily in one or more fields of environmental engineering.

The candidate applications will be reviewed to see that all criteria are met and then presented to the AEEP Board for approval. The Board approved applications will be submitted with a letter of transmittal from the AEEP to the AAEE for consideration by the Academy Review Committee and Board.

Any active AEEP member in good standing who meets the above criteria will be eligible for nomination. When more

than 5 worthy nominations are received, consideration shall be given to the record of service to AEEP.

Note that any AEEP members meeting the criteria may apply directly to the Academy for membership, and acceptance is conditional on an oral examination. In addition, any members that do not have the experience noted above but have 8 or more years experience in this field can apply directly to the Academy, and acceptance is conditional on a written and an oral examination. The Academy address is:

American Academy of Environmental Engineers  
P. O. Box 269  
Annapolis, MD 21404

Qualified AEEP members wishing to be sponsored as a nominee of AEEP or desiring more information should apply directly to the AEEP - AAEE Trustee, N. Bruce Hanes, Department of Civil Engineering, Tufts University, Medford, MA 02155.

AAEE considers applications only once a year. Application deadlines are:

May 15	Received by AAEE
May 8	Reviewed by AEEP Board
May 1	AEEP nominee applications received by Trustee

## Accreditation of Environmental Engineering Academic Programs

N. Bruce Hanes, AEEP Director and delegate to the Accreditation Board of Engineering Technology (ABET) from the American Academy of Environmental Engineering (AAEE), reported in the Summer 1983 issue of The Diplomat (the AAEE newsletter) that the AAEE had been assigned the role of lead society for the accreditation of Environmental Engineering Programs by the ABET Board of Directors. Five other societies have been designated as "cooperating societies": American Institute of Chemical Engineers, American Society of Civil Engineers, American Society of Heating, Refrigeration, and Air Conditioning Engineers, American Society of Mechanical Engineers, and Society of Automotive Engineers. The current guidelines for the accreditation of environmental engineering programs were developed jointly by ASCE, AAEE and AEEP in 1979. Persons with recommendations, ideas, or suggestions on the accreditation process are encouraged to forward them to Bruce Hanes or the AAEE Engineering Education Committee.

## Occupational Safety and Health Hazards

A series of three workshops, sponsored by the National Institute for Occupational Safety and Health (NIOSH), have been held since 1979 to examine the role of engineering education in controlling occupational safety and health hazards.

A report (entitled "Engineering Control of Occupational Safety and Health Hazards: Recommendations for Improving Engineering Practice, Education, and Research") based on these workshops includes: (1) a brief historical review of occupational safety and health engineering; (2) an outline of occupational hazard control information needed by practicing engineers and related professionals; (3) a summary of educational needs in this field; (4) a discussion of needed

research on engineering control; (5) a consolidated listing of high priority recommendations for action.

The workshops concluded that special information needs of engineers and related professionals must be met if we are to solve the serious national health problems resulting from occupational hazards. First, certain professional groups must be targeted to receive the information needed to effectively participate in the task of providing safe and healthful workplaces. Next, basic information must be made available to them including types and areas of hazards, engineering control methods, legal and ethical responsibilities and liabilities, cost effectiveness and benefits of engineering controls, and techniques to monitor the effectiveness of hazard controls.

It was noted that a specialized body of information is available to educate engineers in the field of occupational safety and health. Three types of current educational needs have been identified: (1) incorporating occupational safety and health into engineering education, (2) providing specialized training in occupational safety and health engineering as a professional field, and (3) providing training in engineering techniques and practices for practitioners of occupational safety and health who are not engineers. It was felt that educational programs should cover a full spectrum, including academic degree programs, continuing education courses, and specialized information services for individuals or groups. The engineering community needs to be aware of occupational safety and health issues and requirements under the law so engineers can fulfill their legal obligations as well as protect the worker and the public by developing and implementing effective hazard control technology.

Finally, it was recognized that research is needed on engineering controls for chemical, physical, and biological hazards. Chemical hazards are those encountered principally through inhalation of workplace air, but they may also be absorbed through the skin or ingested. Physical hazards involve traumatic injuries and exposure to physical agents such as radiation and vibration. Biological hazards include exposure to viruses, bacteria, fungi and their products which may be released accidentally to the work environment.

In all, seven conclusions and thirty-nine recommendations were presented in the 1983 Workshop. Further information on this report can be obtained at the following address:

National Institute for Occupational Safety and Health  
M.S. C-9  
4676 Columbia Parkway  
Cincinnati, OH 45226

## CALL FOR PAPERS

### First Asian Conference on Treatment, Disposal, and Management of Human Wastes

Abstracts are solicited for the First Asian Conference on Treatment, Disposal, and Management of Human Wastes. It is sponsored by the International Association on Water Pollution Research & Control and the Japan Society of Water Pollution Control. Of particular interest is low-cost, energy-saving technology. Abstracts are due 30 November 1984 for this conference to be held in Tokyo, 1-3 October 1985. Contact R. A. Conway, Union Carbide Corporation, P.O. Box 8361 (770-342), South Charleston, WV 25303, for an abstract submittal form or for attendance information.

## IAWPRC Workshop

The 4th IAWPRC Workshop on Instrumentation and Control of Water and Wastewater Treatment and Transport Systems will be held in Houston, TX, 27 April-2 May 1985 and will reconvene in Denver, CO, 2 May-4 May 1985. Developments in sensors, telemetry, and computer applications are among the key topics. Abstracts are due by 1 June 1984 to Dr. J. F. Andrews, Department of Environmental Science & Engineering, Rice University, Houston, TX 77001.

## MEETINGS

### IAWPRC 12th Biennial Conference

Registration information for the International Association on Water Pollution Research and Control's 12th Biennial Conference to be held in Amsterdam, 17-21 September 1984 is available from R. A. Conway, Union Carbide Corporation, P.O. Box 8361 (770-342), South Charleston, WV 25303, (304-747-4016). Features in addition to the technical sessions include: concurrent Aquatech Exhibition, four pre and post-conference seminars in nearby countries, nine technical excursions, several thematic tours and two post-conference tours.

### IAWPRC Speciality Conference

**ANAEROBIC TREATMENT OF FOREST INDUSTRY WASTEWATERS**, 11-15 June, 1984, Tampere, Finland; Contact: Mrs. Tuula Granroth, Tampere University of Technology, P.O. Box 527, SF-33101; Tampere 10, FINLAND

**SPECIALIZED CONFERENCE ON ARCTIC WATER POLLUTION RESEARCH—APPLICATIONS OF SCIENCE & TECHNOLOGY**, April, 1985 (new date); Yellowknife, Canada; Contact: Dr. W. A. Bridgeo, Bridco Values Ltd., P.O. Box 3161, Halifax South Post Office, Halifax, Nova Scotia, B3J 3H5, CANADA

**SPECIALIZED CONFERENCE ON ESTUARIAL AND COASTAL POLLUTION—RESEARCH, DETECTION, AND CONTROL**, July, 1985, Plymouth, UK; Contact: Mr. P. Foxton, Natural Environmental Research Council, Science Division, Polaris House, North Star Avenue, Swindon, Wilts SN2 1EU, UK

### Enhanced Biological Phosphorus Removal For Wastewater

A seminar on Enhanced Biological Phosphorus Removal for Wastewater will be held in Paris, France, 24-25 September 1984, immediately after the 12th biennial IAWPRC Conference in Amsterdam. Topics will include microbiology, chemistry, pilot and full-scale studies, and sludge disposal. For further information please contact R. A. Conway, Union Carbide Corporation, P.O. Box 8361 (770-342), South Charleston, WV 25303 (Phone: 304-747-6016).

## AIChE Summer 1984 National Meeting

The American Institute of Chemical Engineers (AIChE) Summer 1984 National Meeting will be held at the Franklin Plaza Hotel in Philadelphia, PA, August 19-22, 1984. Papers will be presented on the "Use of Physical-Chemical Processes for Treatment of Hazardous Wastes". For further information please contact Professor Robert W. Peters, Environmental Engineering, School of Civil Engineering, Purdue University, West Lafayette, IN 47907, (317) 494-2191.

## WELCOME TO NEW AEEP MEMBERS

Dr. Alfonso F. Blanco  
Civil & Environmental  
Department  
Florida International University  
Tamiami Campus, Engr. Sch.,  
VH-315  
Miami, Florida 33199  
(305) 554-2824

Dr. Shoo-Yuh Chang  
Civil Engineering  
University of Missouri-Rolla  
Rolla, Missouri 65401  
(314) 341-4468

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Civil Engineering  
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DuPont Hall  
Newark, Delaware 19715  
(302) 738-8120

Dr. Jon Huey  
Environmental Technology  
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Mississippi  
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Hattiesburg, Mississippi 39406  
(601) 266-4801

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Dr. Brooks W. Newbry  
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Stevens Institute of  
Technology  
Hoboken, New Jersey 07030  
(202) 420-5570

Dr. Sempol Ratasuk  
Environmental Engineer  
Asian Development Bank  
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Manila, Philippines

Dr. Alan F. Rozich  
Civil Engineering  
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Newark, Delaware 19716  
(302) 451-8449

Dr. JoAnn Silverstein  
Civil, Environmental &  
Architectural Engineering  
University of Colorado  
Campus Box 428  
Boulder, Colorado 30309  
(303) 492-6216

Dr. Alan T. Stone  
Geography & Environmental  
Engineering  
The Johns Hopkins University  
Baltimore, Maryland 21218  
(301) 388-7092

Dr. Leon T. Thiem  
Civil Engineering  
University of Rhode Island  
207 Bliss Hall  
Kingston, Rhode Island 02881  
(401) 792-2693

# ACADEMIC MARKETPLACE

**SCHOOL:** University of Utah  
Department of Civil Engineering

**POSITION:** Opening in Environmental Engineering with emphasis on groundwater hydrology and pollutants, or in biochemical technology. Position to be filled at Assistant or Associate Professor level.

**QUALIFICATIONS:** Applicants must have a doctoral degree, preferably in civil engineering, chemical engineering, or related fields, and strong interest in sponsored research.

**RESPONSIBILITIES:** Research, graduate and undergraduate instruction, graduate supervision.

**APPLICATION DEADLINE:** 31 March 1983

**CONTACT:** Dr. George J. Dvorak, Chairman  
Department of Civil Engineering  
University of Utah  
Salt Lake City, UT 84112

**SCHOOL:** Louisiana State University

**POSITION:** Director of the Hazardous Waste Research Center in the College of Engineering.

**QUALIFICATIONS:** Earned doctorate or equivalent in engineering or related discipline and extensive experience in the administration and conduct of basic and applied research.

**RESPONSIBILITIES:** Overall development and administration of the Center's activities.

**APPLICATION DEADLINE:** As soon as possible.

**CONTACT:** Craig S. Hartley, Assoc. Dean  
College of Engineering  
Louisiana State University  
Baton Rouge, LA 70803  
(504) 388-6777

**AGENCY:** National Science Foundation

**POSITION:** Program Director, Ecosystem Studies Program; Salary ranges from \$40,000 to \$65,000; position will be filled on a one- or two-year rotational basis.

**QUALIFICATIONS:** Candidate should have a Ph.D. or equivalent research experience in ecosystem studies. In addition, at least 6 to 8 years of successful scientific research experience beyond the Ph.D. is required.

**RESPONSIBILITIES:** The Program Director works closely with the Deputy Division Director/Division Director on matters of policy, interpretation, and appropriateness; represents the Division in many activities, takes a major responsibility in daily Division routines; provides continuity for many Division activities; assumes responsibility for research proposals in his/her area of specialty submitted to the Foundation, and supplements the research background of the Deputy Division Director/Division Director.

**CONTACT:** Candidates should submit a SF-171, Personal Qualifications Statement, or resume including current salary to the National Science Foundation, Personnel Administration Branch, Room 212, 1800 G St., N.W., Washington, D.C. 20550. Attn: Catherine Handle, Ex 84-1. For further information call 202/357-7840.



**APPLICATION FOR MEMBERSHIP**  
in the  
**Association of Environmental Engineering Professors**

Name \_\_\_\_\_

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 shown below.

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

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

Please return this form along with your dues to:

Benjamin C. Dysarst III  
Environmental Systems Engineering  
Clemson University  
Clemson, SC 29631

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

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