



# Newsletter

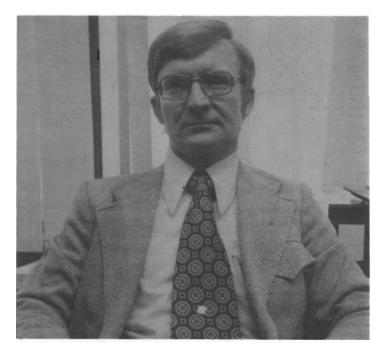
Published Quarterly by the Association of Environmental Engineering Professors.

VOL. 9, NO. 1 JANUARY, 1974

# MIDDLEBROOKS NEW AEEP PRESIDENT

At the December meeting of AEEP Board of Directors, Professor E. J. Middlebrooks of Utah State University was named as President for 1974.

Following completion of his doctoral work at Mississippi State University in 1966, Dr. Middlebrooks joined the University of California, Berkeley, as a post doctorate fellow. He then became Associate Research Engineer and Associate Director of the Sanitary Engineering Research Laboratory (SERL), University of California, until joining Utah State in 1970. He is well known for his many contributions to the field of Environmental Engineering and is the author of numerous papers in his field. He has long been active in many professional societies. He has actively and faithfully served AEEP in numerous ways and his extensive work on manpower needs in environmental activities is well known to all those involved in this field. The entire membership extends its congratulations to Joe and wishes him a very successful year.



**EDDIE J. MIDDLEBROOKS** 

The new AEEP Vice President is Professor Wesley O. Pipes of Northwestern University. Recently re-elected to the Board, Pipes has been active in numerous AEEP Committees and was particularly effective in representing AEEP in the direction of the Third National Conference on Environmental Engineering Education.

Professor Billy Kornegay of Georgia Tech is the new-elected Secretary-Treasurer succeeding Professor Wayne Echelberger whose term on the Board has been completed. Other new Board members are Professor Vinton Bacon of the University of Wisconsin-Milwaukee, appointed to complete the remainder of the term of Dean Linvil G. Rich of Clemson, who resigned from the Board, and Professor Paul H. King of Virginia Tech, recently elected to a three year term along with Pipes and Kornegay. In addition to Echelberger, Professor David Jenkins of the University of California has completed his term of Board Service.

#### FROM THE PRESIDENT'S DESK

It is a great honor to serve as president of AEEP, and I shall make every effort to do a good job. Your suggestions for improvement in our organization are welcomed and encouraged. Without your support and input, AEEP will be an ineffective organization; therefore, I strongly encourage you to let me know your opinions and suggestions for future AEEP activities. Any endeavor you would like to undertake will be considered by the Board for support.

One of the significant changes to occur in the past year was the approval of a new format for the Newsletter and the appointment of an editor for a three-year term. The more professional appearance of the Newsletter should add considerable prestige to AEEP. The willingness of Professor Adnan Shindala to assume this task of developing a new format and to serve for three years is to be commended.

This past year has been rather traumatic for many Environmental Engineering programs because of the decision to phase out federal support for training. The various committees of AEEP have been very active in presenting our views and offering our services in an attempt to avert the potential catastrophe that could be brought on by the reduction in manpower production. These activities will be continued and we hope to improve our good working relationship with EPA so that any changes that

occur in administration policy will reflect the thinking of our membership. Your opinions and suggestions for action by AEEP that will result in improvement in the financial support area will be appreciated. Please send them to me or the appropriate committee chairman. (A listing of all committees will appear in the next issue of the Newsletter.)

The Board will remain alert to legislation that is of particular interest to AEEP members. We will continue to present the views of the membership before these legislative hearings. Your input to any legislative activities of AEEP will be welcomed. Legislation of interest to AEEP should be brought to the attention of Vice President Wes Pipes, Chairman of the Legislative Committee. Wes will welcome any assistance in keeping abreast of current legislative activities.

In addition to planning a workshop following the air pollution workshop in 1974, I hope to initiate professional and financial support for the development of a series of educational projects. The support of EPA will be solicited to develop a series of lectures by outstanding people in environmental engineering which covers technical subjects and to record the historical knowledge accumulated by many of our more mature members and associates. Any suggestions you have for subjects and people who might be included in this project will be appreciated. Suggestions for the subject of the next workshop will also be welcomed.

The unfortunate death of Warren Kaufman is mentioned elsewhere in the Newsletter, but it would be derelict on my part to not mention the great loss to AEEP and the profession. It will require the effort of many to match the contributions and prestige brought to AEEP and the profession by Warren. His contributions will be sorely missed.

If I can be of service to you during the coming year, please do not hesitate to telephone or write.

E. Joe Middlebrooks

committees, and AEEP will present a session at the ASCE Specialty Conference. Joe Middlebrooks, other AEEP officers, and the Board will appreciate, as I have, your continuing efforts on behalf of our profession.

> Richard I. Dick 1973 President

#### MEMORIAL



Dr. Warren J. Kaufman

# FROM THE PAST PRESIDENT'S DESK

How could Wes Pipes have devoted so much time to serving as AEEP's coordinator for the Third National Conference on Environmental Engineering Education and then agree to accept the responsibility for guiding the development of AEEP position papers on water pollution control issues? What motivated Paul King and Cliff Randall to faithfully publish the AEEP Newsletter on schedule? And why did Adnan Shindala agree to serve as editor of this new Newsletter? These are but examples of the sort of questions which come to mind as I reflect on the past year's activities and think about what makes AEEP work.

I know of no professional organization with so much activity per capita as AEEP. Historically this has been the case, and the intensity of activity per member grows along with the membership.

Amongst the various professional organizations to which we all belong, AEEP is unique in not encompassing a membership base sufficiently large to support an executive secretary and staff. Thus the high level of the Association is attributable solely to the unselfish efforts of its members.

During my term as president, I was particularly fortunate in having such support from members. I would like especially to thank committee chairmen for their service and to express my appreciation to members of the Board of Directors for their support and advise.

The year 1974 will be a busy one for AEEP. Position papers will be completed, the new Register of Programs in Environmental Engineering will go to press, a workshop and seminar will be held, the new microbiology laboratory manual will be put into draft form, testimony again will be presented to congressional

Professor Warren J. Kaufman died suddenly on the morning of November 10, 1973, of an apparent heart attack. Memorial services were held on November 18.

Warren had returned to Berkeley on a brief working visit from sabbatical leave at the Polytechnic Institute in Milan, Italy. His untimely death at age 51 was sudden and unexpected.

Warren was Director of the Sanitary Engineering Research Laboratory at the University of California at Berkeley and had served on the faculty since 1951. It is unnecessary to acclaim his considerable accomplishments to members of AEEP. His research contributions were brilliant, his professional activities extensive, and his company stimulating. He was one of the founders of AEEP, and at the time of his death was serving actively as one of our delegates to the USA National Committee.

Warren is survived by his wife, Kathryn; a daughter, Susan, who is a junior at the University of California at Davis; and two sons, Kenneth, a senior, and Stephen, a sophomore, at the University of California at Berkeley. The family has requested that remembrances be made in the form of contributions to the Heart Association in the name of Dr. Warren J. Kaufman. The AEEP resolution to the family concerning Warren's stature and contributions follows this memorial. Those who may wish to communicate with Warren's widow may do so at the following address:

Mrs. Kathryn Kaufman c/o Sanitary Engineering Program Room 633 Davis Hall University of California at Berkeley Berkeley, California 94720

Our profession has been significantly enhanced by Warren's contributions and is considerably diminished by his death.

# RESOLUTION

Whereas Warren J. Kaufman was a founding member of the Association of Environmental Engineering Professors in 1963

and whereas he served as a member of the Board of Directors of the Association from 1963 to 1966 and from 1967 to 1969

and whereas he served as Secretary-Treasurer of the Association from 1963 to 1964

and whereas he was the Association's representative on the National Committee for representation of the United States to the International Association on Water Pollution Research from 1972 to 1973

and whereas he was a vigorous, enthusiastic, and ever-hardworking member of the Association over its entire existence

and whereas he was a truly well-respected member of the Sanitary Engineering profession and a gifted engineering educator whose contribution to the profession lives on in the expertise of his students and colleagues and in the application of his research

therefore let it be resolved this day by the Board of Directors of the Association of Environmental Engineering Professors that the life of Warren J. Kaufman be remembered with gratitude and appreciation for its vigor, service, and dedication to this Association and to his chosen profession.

# EPA TRAINING GRANT PHASE-OUT CONTINUES

The previously announced phase-out of EPA Graduate Training Grants has become a reality. Robert F. Ruhl, EPA Training Grants Program Officer, outlined agency policy at the recent AEEP Board meeting in Chicago. The current time table calls for funding through June 1976 at the following approximate levels: \$3.4 million for fiscal year 1973-74 (current year), \$2.7 million for fiscal year 1974-75, and \$1.5 million for fiscal year 1975-76.

On a more positive note, Ruhl cited the proposed reestablishment, although on a limited basis, of the EPA Research Fellowship program. He also discussed EPA interest in funding programs in the area of Continuing Education and the possibilities of support for research projects in which training activities were an integral part of the research program.

At the same meeting Professor Wesley O. Pipes, AEEP Vice-President, gave an interim report based on his questionnaire regarding graduate enrollments in the current academic year. In the face of reduced EPA support, Pipes reported a substantial decrease in all enrollment categories. Additional data resulting from this survey are presented below.

# GRADUATE ENROLLMENTS IN ENVIRONMENTAL ENGINEERING SHOW PRECIPITOUS DECLINE

Early in November a survey of enrollments in graduate programs with an environmental engineering or sanitary engineering designation was undertaken by Wesley O. Pipes of Northwestern University in behalf of the AEEP Training Support Committee. Questionnaires were sent to 77 schools having such programs. A summary of the information from the 55 schools which had re-

turned the questionnaires by December 18, 1973, is given in the table below.

Academic Year	1971-72	1972-73	1973-74
A. Programs Related to Water Pollution	on		
<ol> <li>Total graduate students</li> </ol>	1591	1638	1513
2. Entering M.S. Students	775	783	689
3. Students Supported on			
EPA Traineeships	567	516	424
B. Other Environmental Engineering	Programs		
1. Total Graduate Students	368	376	327
2. Entering M.S. Students	173	194	15 <b>2</b>
3. Students with EPA Support	130	134	93

These figures show an approximate 13% decrease in new M.S. students entering graduate programs related to water pollution control and an approximate 25% decrease in new M.S. students entering other environmental engineering graduate programs between the 1972-73 and 1973-74 academic years. This comes at a time when the first effect of the EPA's announced phase-out of support for graduate students is being felt and when there is an increase in the demand for engineers with education in environmental engineering.

The figures have some other interesting features. Apparently students studying water pollution control make up approximately 90% of the graduate students in programs with either an environmental engineering or sanitary engineering designation. The number of trainees reported for these programs account for considerably less than half of the traineeships which EPA has provided. Either a major share of the EPA traineeships go to graduate programs which have a designation other than environmental engineering or sanitary engineering or the 22 schools which have not yet reported their enrollments for this survey have a major share of the EPA traineeships.

The objective of this survey is to provide information which can be presented to Congress to support the plea for additional training funds for the 1975 fiscal year. Schools which have not returned their questionnaires are urged to do so as soon as possible so that the data will be complete. Schools which have not received requests for this information should contact Professor Wesley O. Pipes, Department of Civil Engineering, Northwestern University, Evanston, Illinois 60201.

# AEEP BROADENS SCOPE WITH REGARD TO NATIONAL POLICY

At the meeting of the AEEP Board of Directors in Cleveland prior to the WPCF Conference, a decision was made to broaden the scope of AEEP's activities concerning national policy. Traditionally, AEEP has limited the extent of its expressed concern on national issues to matters related to manpower, training and research. Yet the AEEP bylaws include as objectives of the organization the development of unified positions on questions concerned with national resources and the strengthening and advancement of our field of professional interest. As a first venture in this area, five position papers on national water pollution control policy are being developed. Tentative titles of these papers are "Water Quality Goals and Objectives", "Financing Pollution Control Programs", "National Research Policy", "Manpower Needs", "Implementation of Pollution Control Programs". Professor Wesley Pipes, Northwestern University, will coordinate the development of these papers.

Action taken at the meeting of the AEEP Board held on December 13-14, 1973, at Chicago included the following items:

The long standing initiation fee required for new AEEP members was rescinded as of January 1, 1974. The Board took this action in order to stimulate the recruiting of new members and in so doing would encourage all present members to actively participate in this recruitment program.

Professor Richard I. Dick, immediate Past-President of AEEP, was named to replace the late Warren J. Kaufman of the University of California as one of two official AEEP delegates to the USA National Committee of the International Association on Water Pollution Research. Professor Fred Pohland of Georgia Tech was named to succeed Dick as an alternate AEEP delegate to USANC.

The Board heard a report on the current status of the new revision to the Register of Graduate Programs in Environmental Engineering. Funding for this publication has been approved by EPA, and updated submittals from each program will be requested prior to February 1, 1974. In addition to the forthcoming volume on engineering programs, a new volume concerned with Environmental Sciences programs has been proposed.

The Workshop Committee is formulating plans for the 1974 workshop which will be held in December, 1974, at a warm (hopefully) location in the Southeastern United States. The committee is chaired by Professor J. E. Quon of Northwestern University. The workshop will explore educational techniques pertaining to interfacial relationships among air, water and land resources.

Professor John T. O'Connor reported on the progress achieved in developing a unit operations manual. It is hoped that this manual will be available in the near future.

## AEEP MANUALS

AEEP has initiated the preparation of manuals on water chemistry, environmental engineering unit operations and unit processes and, most recently, water microbiology. These manuals are intended to serve as broad-based teaching aids for environmental engineering faculty.

Have you ever wondered how such projects were initiated? It has been primarily through the effort of one or a few individuals who felt there was a specific teaching need and who were willing to undertake a project to fulfill that need. Many other AEEP members while not having enough time to coordinate the preparation of a manual (themselves) have been willing to spend time aiding in the preparation or revision of the AEEP manuals.

Do you see a need for a manual to serve as a teaching aid? Perhaps, a manual on:

- the design of water pollution control facilities
- the assessment of environmental impact
- optimization and the systems approach to environmental engineering design
- air analysis laboratory manual
- unit operations and unit processes in air pollution control
- $\boldsymbol{-}$  alternatives in the management of solid wastes.

If you would like to become involved in such an effort, either as the principal coordinator or as a contributor, why not drop a note to:

John T. O'Connor Department of Civil Engineering University of Illinois Urbana, Illinois 61801 Revised pages to be included in the AEEP Water Chemistry Manual are currently available for distribution. Those who did not receive copies of the revised pages should contact Professor Joseph F. Malina, University of Texas at Austin.

# AEEP PLANS PURDUE ACTIVITIES

Plans are currently being formulated for AEEP activities at the Purdue University Industrial Wastes Conference scheduled for May 7-9, 1974, at Purdue.

AEEP will sponsor a seminar on Tuesday, May 7, at 8:00 a.m. The subject for discussion will be Continuing Education. Participants will be announced in the next issue of the *Newsletter*. The AEEP Open Meeting will be held on Tuesday evening, May 7.

# ENVIRONMENTAL PROTECTION CONFERENCE HELD FOR EDUCATORS

A conference for educators to examine opportunities and problems in undergraduate education in environmental protection was held in Chapel Hill on May 3-4, 1973. The conference was conducted by the Department of Environmental Sciences and Engineering and Continuing Education and Field Service of the School of Public Health. The intent of the conference was to stimulate new and improved environmental curricula in undergraduate institutions. Environmental issues as they relate to undergraduate education were examined. Discussion sessions aimed at identifying interests or needs of participating institutions and resources available to them were conducted. Dr. Robert Harris of the Department of Environmental Science and Engineering, University of North Carolina, served as conference director.

# AWARDS

### George Schroepfer Receives Emeritus Membership

Emeritus membership in AEEP was awarded to Professor George Schroepfer, University of Minnesota. George's long service to the profession was illustrated by noting that he served as the third president of the Water Pollution Control Federation. Our sincere congratulations to Dr. Schroepfer.

# Tom Keinath and Marty Wanielista Receive First Award For Outstanding Service

A new award to recognize outstanding service to AEEP was announced at the association meeting in Cleveland. The first awards were presented to Professors Tom Keinath, Clemson University, and Marty Wanielista, Florida Technological University, for their distinguished service in suggesting, developing, and presenting the Eighth Annual AEEP Workshop on "Mathematical Modeling in Environmental Engineering".

# Waldron M. McLellon Honored With A Chair

Dr. Waldron M. McLellon, Head Department of Civil Engineering and Environmental Science at Florida Technological University, was named as the first Gordon J. Barnett Professor of Environmental Systems Management. Mr. Barnet, a prominent Central Florida developer, funded two professorships through the

Florida Technological University Foundation to expand research in environmental science and environmental systems management. Our congratulations to Dr. McLellon.

#### CONTINUING EDUCATION

#### Process Design Techniques For Industrial Waste Treatment

This seminar is sponsored by Associated Water and Air Resources Engineers, Inc. of Nashville, Tennessee, and will be held on the following dates:

January 28-30, 1974 — Atlanta, Georgia March 18-20, 1974 — New York, New York April 22-24, 1974 — San Francisco, California June 3-5, 1974 — Chicago, Illinois

This seminar is directed towards developing an integrated design for treatment of an organic wastewater to meet the new Federal effluent criteria. Not only are process concepts discussed, but each step in the design is calculated. Both capital and operational costs are comprehensively developed for each unit process and for alternative systems.

Registration fee: \$200\* per person.

Pretreatment of Industrial Wastewaters For Discharge Into Municipal Sewers

This seminar is sponsored by Associated Water and Air Resources Engineers, Inc. of Nashville, Tennessee, and will be held on the following dates:

January 31-February 1, 1974 — Atlanta, Georgia March 21-22, 1974 — New York, New York April 25-26, 1974 — San Francisco, California June 6-7, 1974 — Chicago, Illinois

This seminar will describe principles and design procedures for pretreatment processes and will elaborate on methods for specific constituents such as color, heavy metals, and free and emulsified oil and grease. Anticipated regulatory pretreatment criteria for general and specific industrial categories will also be discussed.

Registration fee: \$150\* per person.

For further information on both courses, write: AWARE, Inc., 2002 Richard Jones Rd., Suite C-305, Nashville, TN 37235.

\* Note: registration for both programs: \$300 per person.

International Association on Water Pollution Research (IAWPR) Sponsor Short Course Series

The International Association on Water Pollution Research (IAWPR) is presenting a Short Course series in Birmingham, England, as a post-conference activity of the Seventh International Conference of IAWPR, Paris. This series will be presented September 16-20, 1974, and will include three concurrent courses:

Course I Design Aspects of Biological Treatment

Course II Physical-Chemical Treatment

Course III Water Quality Modeling

Internationally recognized authorities have been selected to present lectures on specific topics and to conduct special discussion sessions.

The course will be conducted at the University of Birmingham. A fee of \$175 per person covers registration and short course publications. Additional information can be obtained from:

Dr. Davis L. Ford, Co-Chairman Continuing Education Committee, IAWPR 3109 N. Interregional Austin, Texas 78722

Manhattan College Conducts 19th Summer Institute Water Pollution Control

Two one-week courses will be offered concurrently, May 20th-24th, 1974, for advanced study in:

**Biological Waste Treatment** 

Mathematical Modeling of Natural Water Systems Enrollment, on a pre-registration basis, will be limited. Tuition for each of the five-day courses is \$250.00.

This continuing engineering education program is designed to enhance the competence of practicing engineers and scientists in governmental agencies, industrial concerns, consulting engineering offices, research organizations and academic institutions.

For further information, contact:

Donald J. O'Connor Environmental Engineering and Science Program Manhattan College Bronx, NY 10471

#### Cornell Conducts Industrial Wastewater Control Course

A short course on engineering control of industrial waste-waters will be given at the Cornell University, College of Engineering, June 24-28, 1974.

Designed for engineers and others responsible for industrial wastewater control, the course is intended both to make them aware of the severe limitations that regulatory agencies are imposing on all wastewaters discharged to natural waters and to improve their ability to produce effluents that meet the new standards.

Topics will include water pollution control legislation, regulations and standards, industrial wastewater disposal alternatives, effluent reclamation and recycle, biological and physical-chemical treatment process theory and application, solids disposal, synthesis and cost estimation of wastewater treatment systems.

#### CALL FOR PAPERS

#### Water Pollution Control Federation-47th Annual Conference

The Water Pollution Control Federation, in anticipation of its 47th annual conference, October 6-11, 1974, in Denver, Colorado, is now calling for technical papers for consideration for that meeting's program.

Acting through its Program Committee, the Federation invites papers for sessions on the following subjects: water reuse; automation and process control; land treatment and disposal; energy and natural resources impacts; industrial wastes case histories; treatment plant operations research; wastewater collection systems; wastewater treatment plant design; process equipment developments; and water pollution control research.

Interested authors should request abstract submission instructions from the Chairman of the Program Committee, Mr. John H. Robertson, Catalytic, Inc., 1528 Walnut Street, Philadelphia, PA 19102.

Deadlines for the submission of abstracts is January 31, 1974 for all sessions, with the exception of the research symposium. The deadline for the research symposium is April 1, 1974.

Abstracts of papers on subjects other than those listed and

any other inquiries regarding the technical program should also be sent to the Chairman of the Program Committee.

# DR. OKUN RETIRES AS DEPARTMENT HEAD

Dr. Daniel A. Okun, who joined the faculty of the Department of Environmental Sciences and Engineering, University of North Carolina, in 1952 and who assumed the duties as Head of the Department in 1955, stepped down from this position on July 1, 1973. In leading the Department to its position of prominence in academic environmental engineering, Dr. Okun has gained international status as an expert in the field of water supply planning. Dr. Okun will be spending the 1973-74 academic year at the University College, London. A recipient of a Fulbright-Hays award, he has been appointed a Visiting Professor in the Department of Civil and Municipal Engineering, In addition, he will be engaged in research projects concerned with the reorganization of water management in England and Wales. The research is sponsored by the Rockefeller Foundation and the National Science Foundation through the University of North Carolina. Dr. Okun will be returning to the University of North Carolina in the fall of 1974. The AEEP wishes Dr. Okun continuing success in his new endeavors.

## WELCOME TO AEEP NEW MEMBERS

Dr. John F. Ferguson, Assistant Professor Department of Geog. and Environmental Engineering The Johns Hopkins University Baltimore, Maryland 21218

Dr. Vladimir Novotny Assistant Professor of Civil Engineering Marquette University Urbana, Illinois 61801

Dr. Kazuyoshi Kawata Associate Professor of Environmental Health The Johns Hopkins University 615 North Wolfe Street Baltimore, Maryland 21205

Dr. Edward S. K. Chian
Assistant Professor of Environmental
Engineering
3217 Civil Engineering Building
University of Illinois
Urbana, Illinois 61801

Dr. James P. Heaney Associate Professor of Environmental Engineering Sciences University of Florida 1401 NW 28th Street Gainesville, Florida 32611

Mr. Phillip C. Singer Associate Professor University of North Carolina 617 Long Leaf Drive Chapel Hill, North Carolina 27514

Mr. Joe Miller Morgan Assistant Professor of Civil Engineering Auburn University 105 North Cedarbrook Drive Auburn, Alabama 36830

# **NEW APPOINTMENTS**

# University of North Carolina

Donald E. Francisco and Donald L. Fox have been appointed Lecturers in the Department of Environmental Sciences and Engineering. Doctors Francisco and Fox have both been associated with the Department for the past several years.

# Mississippi State University

The Department of Civil Engineering, Mississippi State University, has added two new staff members in the area of Environmental Engineering. Dr. Marvin Bond and Dr. Donald Hill joined the department as associate and assistant professors of environmental engineering, respectively.

# ACADEMIC POSITIONS AVAILABLE

## California State University, Northridge

The Department of Civil Engineering at California State University, Northridge, is seeking a recent Ph.D., with a background in water quality, for the position of Assistant Professor of Engineering. The Civil Engineering Department is responsible for teaching of courses in the general areas of fluid mechanics, heat transfer, thermodynamics, air and water pollution control, and nuclear engineering. Applications must be forwarded to Dr. Gary J. Hordemann, Chairman, Department of Civil Engineering, California State University, Northridge, CA 91324.

# McMaster University

The Department of Chemical Engineering at McMaster University has two openings for faculty in environmental engineering with emphasis in Water and Waste Water treatment. The first is a two year contractual appointment as Assistant Professor with a possibility of extension beyond the two years. The second is for a senior person as visiting professor for the academic year 1974-75. Applications should be made to Dr. C. M. Crowe, Chairman, Department of Chemical Engineering, McMaster University, Hamilton, Ontario, L854L7.

# University of Vermont

The Department of Civil Engineering at the University of Vermont has two faculty positions available at the assistant and associate professor level. Both positions involve graduate and undergraduate teaching, research, and student advising. Research responsibilities require the performance of research activities in the area of environmental engineering with some emphasis on problems in the low-density, low-resource areas. A baccalaureate degree in civil engineering and a Ph.D. or equivalent degree are required for both positions. In addition, four to six years professional experience following the completion of the Ph.D. degree is required for the position of Associate Professor. This faculty member will be responsible for supervising the environmental engineering program in the Department of Civil Engineering. Contact Professor J. C. Oppenlander, Chairman, Department of Civil Engineering, University of Vermont, Burlington, Vermont, 05401. An Equal Employment Opportunity/Affirmative Action Employer.

Clarkson College Seeks Chairman — Civil and Environmental Engineering Department

Applications are solicited for the chairmanship of the Civil

and Environmental Engineering Department which has a large undergraduate program as well as graduate programs at the M.S. and Ph.D. levels. Applicants must have a strong background and national prominence in some aspect of environmental engineering. Rank and salary negotiable. Reply to: W. A. Thornton, Chairman, Search Committee, Department of Civil and Environmental Engineering, Clarkson College of Technology, Potsdam, New York 13676. An Equal Employment Opportunity/Affirmative Action Employer.

#### University of Washington

Three positions are open in the Water and Air Resources Division of the Department of Civil Engineering at the University of Washington, Ph.D. required.

- 1. Assistant or Associate Professor of water chemistry with a primary interest in applied and water quality problems. The applicant should be willing to contribute to interdisciplinary team efforts. Previous experience in water quality research is essential as this person will be responsible for continuing and expanding on-going programs in the Division. Undergraduate and graduate teaching is expected.
- 2. Research Assistant Professor. The position entails research on applied limnological and microbiological problems in an aquatic environment. The applicant should preferably be a limnologist with supplementary training in microbiology and will be expected to assist in directing on-going research in the eutrophication of lakes as well as develop new related projects. Research assistance in the area of waste treatment microbiology is a secondary area of activity. A limited amount of teaching will be expected.

 Assistant Professor with primary interest in biological waste treatment and sanitary engineering design. Duties involve, undergraduate and graduate instruction, and research in waste water quality control.

Send resume to Professor V. B. Hammer, Department of Civil Engineering, 303 More Hall FX 10, University of Washington, Seattle, Washington 98195 (206-543-2549). Resumes must be received by January 31, 1974. Equal Opportunity and Affirmative Action Employer.

#### South Dakota School of Mines & Technology

The Department of Civil Engineering at South Dakota School of Mines and Technology, Rapid City, South Dakota, is seeking an Assistant or Associate Professor; Ph.D. Specialty in Environmental or Sanitary Engineering. Contact Professor William V. Coyle, Department of Civil Engineering, South Dakota School of Mines and Technology, Rapid City, South Dakota 57701; phone 605-394-2442.

## Illinois Institute of Technology

Illinois Institute of Technology seeks additional Environmental Engineering Faculty. The Department of Environmental Engineering of IIT has an opening at the Assistant or Associate Professor level for an environmental engineer with background and interest in pollution control technology and design. Interested persons should contact Professor James W. Patterson, Department of Environmental Engineering, Illinois Institute of Technology, Chicago, Illinois 60616.

### EDITOR'S NOTE

The editor would like to extend his personal gratitude as well as the gratitude of AEEP membership to the past co-editors of the Newsletter, Paul King and Clifford Randall of Virginia Polytechnic Institute. Their work has significantly improved the quality of the Newsletter and has made a definite contribution to the Association. The editor will strive to continue management of the Newsletter in the excellent tradition of his predecessors.

The stated purpose of the AEEP Newsletter is to promote communication between the membership, to provide a source of current information for the members, and to provide a forum for discussion of topics of current interest. In order to enhance this purpose, the editor is soliciting from the membership assistance in channeling news, ideas, or comments to the Newsletter. The vitality and survival of the Newsletter will be reflected by the response of the membership to this solicitation. The circulation of the Newsletter, especially to nonmember groups and organizations, makes it a dynamic force in guiding and publicizing the activities of our profession. The Newsletter reflects our profession; therefore, every attempt should be made to make it an excellent representative of our profession.

Adnan Shindala



#### EDITOR

Adnan Shindala Department of Civil Engineering Mississippi State University Mississippi State, Mississippi 39762

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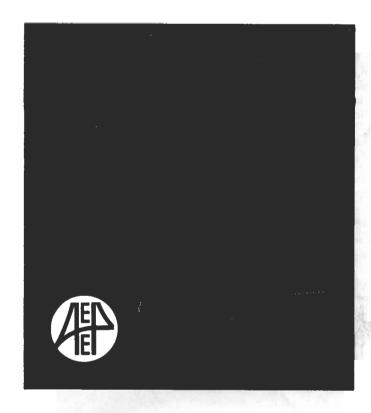
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AEEP NEWSLETTER is published quarterly by the ASSOCIATION OF ENVIRONMENTAL ENGINEERING PROFESSORS.