



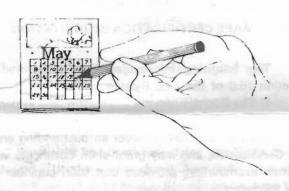
# Newsletter

Published Quarterly by the Association of Environmental Engineering Professors.

**VOLUME 12, NO. 2** 

**APRIL 1977** 

MARK YOUR CALENDER
AEEP UPCOMING EVENTS



AEEP Activities at Purdue

Sunday, May 8, 1977 -

9:00 AM - AEEP Board Meeting, West Lafayette Hilton Hotel.

Monday, May 9, 1977 -

9:00 AM - AEEP Workshop on Applied Statistics in Environmental Engineering, Room 214, Stewart Center

Tuesday, May 10, 1977 -

8:00 PM - AEEP Open Meeting, Room 214, Stewart Center.

We urge all of the AEEP members attending the conference to join us at the Workshop and Open Meeting.

AEEP WORKSHOP
ON
APPLIED STATISTICS IN
ENVIRONMENTAL ENGINEERING

TO BE HELD IN CONJUNCTION WITH
PURDUE INDUSTRIAL WASTE CONFERENCE
MONDAY, 9 MAY 1977
ROOM 214 STEWART CENTER, PURDUE UNIVERSITY

The Association of Environmental Engineering Professors is sponsoring a one-day workshop on "Applied Statistics in Environmental Engineering." The workshop will be held at Purdue University, the Monday immediately preceding the Purdue Industrial Waste Conference. The workshop is free to AEEP members and graduate students enrolled in their programs. Non-members will be charged a registration fee of \$15. A set of workshop notes will be distributed to each attendee.

## Program:

Dr. G.E.P. Box, "Intervention Analysis in Environmental Engineering"

Dr. J. Stuart Hunter, "Design and Analysis of Experiments for Linear Models in Environmental Engineering"

Dr. Park M. Reilly, "Design and Analysis of Experiments for Nonlinear Models in Environmental Engineering"

For further information please contact:

T.E. Pollock, Conference Chairman

Department of Environmental Systems Engineering
401 Rhodes Research Center

Clemson University

Clemson, SC 29631

(803)656-3276

#### THE PRESIDENT'S CORNER

As you are now aware, AEEP has been recently approved as the tenth sponsoring organization of the American Academy of Environmental Engineers (AAEE). The Academy, in turn, has now applied for member status in the Engineers' Council for Professional Development (ECPD). Dr. P.W. Purdom has been nominated by the AEEP Board and has been accepted by the Academy as a trustee representing AEEP. Thus a formal mechanism has now been established for inputs into the Academy, and through the Academy into the accreditation procedures of ECPD. Up to this point in time there has been no way for the AEEP membership to become involved in curricula evaluations and accreditations. Inputs of the Academy into such actions were on a random ad-hoc basis.

Your education committee, in cooperation with the education committee of AAEE, has prepared a joint draft of a "Guide for Environmental Engineering Visitors on ECPD Accreditation Teams." This has been approved in principle by the AEEP Board at the December 1976 Much of the environmental engineering meeting. accreditation activity has, up to this time, been covered by the American Society of Civil Engineers (ASCE), due to the outgrowth of sanitary engineering from many civil engineering programs and to the close affinity that still exists. Thus ASCE feels that it has a role to play in continued participation in curricula guidance and in the accreditation processes. Recognizing this interest and overlapping of the three main groups, the AAEE Executive committee, at its March 1977 meeting, directed the chairman of the educational committee to form an ad-hoc committee of AEEP, AAEE, and ASCE members to review and finalize the document for approval by the three participating organizations. The Committee on Curricula and Accreditation (CC&A) of ASCE has been approached as the guiding hand of that society and is in favor of proceeding. Hopefully the ad-hoc committee can be named in the near future. It is planned that the guide, after receiving approval of all participating bodies, would then be published jointly as the recognized guidance document for evaluating both undergraduate and graduate environmental engineering programs.

Your attention is directed to Section 10.8(3) of the AAEE bylaws, which are printed in this newsletter, whereby each sponsoring organization can nominate five distinguished environmental engineers to the Academy for certification by invitation, rather that by the normal examination route. A nominating committee of AEEP members who are also Academy members will be named to complete this task before fall. 1977.

The AEEP has been involved in several past cooperative efforts with the Academy, such as joint sponsorship for the Third Annual Conference on Environmental Engineering Education, held in Philadelphia, and the joint publishing of the most recent directory for

graduate environmental engineering programs. Further cooperative efforts and increased individual joint membership in the two organizations can only serve to further the aims and objectives that are common to both groups.

George P. Hanna University of Nebraska

# AEEP ELECTED SPONSORING ORGANIZATION OF AAEE

The Association of Environmental Engineering Professors (AEEP) has been elected the tenth sponsoring organization of the American Academy of Environmental Engineers (AAEE). Paul W. Purdom, Jr. was also approved by the AAEE Board of Trustees as the AEEP Trustee. His term of office is for three years.

#### AAEE CERTIFICATION BY INVITATION

The following information was abstracted from Section 10.8 of the AEE Bylaws:

- 1) The Board, upon the affirmative vote in person of two-thirds of the number of Trustees present at a regular or special meeting may consider an outstanding engineer for Certification, and may grant such Certificate without written examination, provided that such engineer meets the following qualifications:
  - a) Must be of a good moral character and of high ethical and professional standing.
  - b) Must have at least fifteen years of engineering experience acceptable to the Board, in one or more of the specialty fields of environmental engineering, following graduation from a college or a university of recognized standing.
  - c) Must be qualified as defined by the criteria established by the Board.
  - d) Must be engaged in profession on a full time basis.
- 2) Each sponsoring organization of the Academy may submit each year to the Academy a list of not more than five of its qualified members to the Board as applicants for consideration by the Board for certification without examination.
- 3) The Board will consider for certification without examination all members of a new sponsoring organization which meet the criteria given above. Such consideration will be given to AEEP for the next three years.
- 4) A person certified by invitation does not become a member of AAEE until the nominee pays for the Certificate and dues for the first year following the date the Board of Trustees certifies such nominee by invitation.

#### AEEP OPEN MEETING

8:00 p.m. Tuesday, May 10, 1977 Room 214 Stewart Center, Purdue University

The meeting will feature remarks
by
Dr. William Butcher, Acting Program Director
Environmental and Urban Design Program
Division of Engineering, NSF

Dr. Butcher will discuss the NSF programs relating to environmental research.

A short business meeting will precede the featured speaker.

#### CALL FOR PAPERS

# NINTH BIENNIAL CONFERENCE OF THE INTERNATIONAL ASSOCIATION ON WATER POLLUTION RESEARCH

A call for papers has been issued for the Ninth Biennial Conference of the International Association on Water Pollution Research to be held in Stockholm on June 12-16, 1978. The program for the Conference is to be selected from completed papers (not abstracts) submitted for consideration prior to September 1, 1977.

Papers are to fit into one of four major themes for the Conference: Advanced Wastewater Treatment, Sludge Treatment, Pollution from Urban Run Off, and Studies of Receiving Waters. Manuscripts are to be limited to 5,000 words and are to be prepared in accordance with format requirements specified by IAWPR. Prior notification of intent to submit a paper is requested.

Individuals interested in submitting a paper should contact IAWPR for a more detailed listing of topics covered by the four major themes of the Conference and for details on manuscript requirements. The address is:

Secretary-Treasurer

International Association on Water Pollution Research Chichester House 278 High Holborn London, WC1

Richard I. Dick
University of Delaware

# FOR BEST DOCTORAL THESIS RELEVANT TO PRACTICE

This is to announce that applications are being accepted for the Engineering Science Award of \$1000 for the best doctoral thesis relevant to practice published between July 1, 1976 and June 30, 1977. The award will be \$500 for the Ph.D. candidate, both monies to be spent at the individuals' descretion.

The research will be judged on the following basis: Scientific & technical - 20%; originality - 20%; practical - 50%, and clarity - 10%. Three copies of the candidate's thesis must be submitted by June 30, 1977 to Dr. Charles R. O'Melia, Department of Environmental Engineering, University of North Carolina, Chapel Hill, NC 27514. (919) 966-1052.

### IAWPR CONFERENCES

Forthcoming Specialized and Regional Conferences sponsored by IAWPR include:

Instrumentation, Control, and Automation for Clean Water and Wastewater Treatment Systems, London and Stockholm, May 16-20, 1977

Water for Life - Second Regional Conference on Water and Effluent Management in Southern Africa, Lesotho, South Africa, June 6-9, 1977

International Conference on Advanced Treatment and Reclamation of Wastewater, Johannesburg, South Africa, June 13-17, 1977

Specialized Conference on River Basin Management, Essenn, West Germany, September 12-16, 1977

Conference of the International Association on Water Pollution Research, Stockholm, June 12-16, 1978

Additional information about these and future conferences can be obtained by contacting:

Dr. Richard S. Engelbrecht
Secretary-Treasurer
United States of America National Committee
Department of Civil Engineering
University of Illinois at Urbana-Champaign
Urbana, Illinois 61801
(217) 333-3822

Martin J. Thomas
Department of Civil Engineering
Rose-Hulman Institute of Technology
Terre Haute, Indiana 47803

Alphonse E. Zanoni
Department of Civil Engineering
Marquette University
1515 West Wisconsin Avenue
Milwaukee, Wisconsin 53233

Miguel A. Medina, Jr.
Department of Civil Engineering
Duke University
Durham, North Carolina 27706

### **FULBRIGHT SCHOLAR IN ENVIRONMENTAL STUDIES**

The New Zealand-United States Educational Foundation is inviting applications from persons with appropriate qualifications to be a visiting Fulbright scholar in Environmental Studies at the University of Waikato.

Applications close 1 June 1977 with The Council for the International Exchange of Scholars, 11 Dupont Circle, Suite 300, Washington, D.C. 20036, U.S.A.

The University of Waikato has requested an appointee in 1978 who will be able to continue the existing programme of teaching environmental courses and assisting with the development of an Environmental Studies Centre at the University. Applicants should be people with broad interests and experience in teaching and research on environmental issues. No one discipline or profession is preferred.

The 1977 Fulbright scholar is Dr. P. Aarne Vesilind, Department of Civil Engineering, Duke University. It is intended that the 1978 scholar continue the work of Dr. Vesilind, appreciating that the direction and content will depend on the appointee's academic and professional background.

Further information on Environmental Studies at the University of Waikato is available from the letterhead address. Enquiries about the Fulbright award should be addressed to:

The Council for the International Exchange of Scholars
11 Dupont Circle
Suite 300
Washington D.C. 20036
U.S.A.



John C. Crittenden Joins Washington State University

Dr. John L. Crittenden has joined the faculty of the Department of Civil and Environmental Engineering, Washington State University, Pullman, Washington as an assistant professor. His educational background includes a B.S.E. in Chemical Engineering, M.S.E. and Ph.D. in Civil and Water Resources Engineering, all from the University of Michigan. His field of specialization is in the modeling of the carbon absorption process, limnoligical modeling, cumputer simulation and numerical methods, and physical-chemical treatment methods.

#### Myrton C. Rand Receives Milton T. Hill Award

On January 18, 1977, Dr. Myrton C. Rand, Professor of Civil Engineering at Syracuse University, was presented the Milton T. Hill Award by the New York State Water Pollution Control Association for his contributions to the advancement of water pollution control personnel.

#### Schnoor Joins Staff At Iowa

Dr. Jerald L. Schnoor joined the faculty of the Environmental Engineering Program at the University of Iowa on January 1, 1977. Jerry's principal specialty areas are the physical-chemical treatment of wastewaters and the mathematical modeling of water quality. He received his B.S. degree in Chemical Engineering from Iowa State University in 1972 and his M.S. and Ph.D. degrees in Environmental Health Engineering from the University of Texas in 1974 and 1975, respectively. Jerry also served for one year as a National Science Foundation Post Doctoral Fellow at Manhattan College.

Dr. Schnoor has earned a number of academic honors and awards including the Wallace E. Barron Outstanding Graduating Senior Award (Iowa State); the National Wilkinson Award for the National Phi Gamma Delta Outstanding Graduate; the Iowa State Engineering Leadership Award; and the University of Texas Outstanding Student Award. Dr. Schnoor was a Hawley Fellow of the Texas Section of the American Society of Civil Engineers. He also served as chairman of the Graduate Engineering Council for one year while at Texas.

Jerry is originally from Davenport, Iowa, and his wife
Jana is from Rockford, Illinois.

The proposed conference on "Fundamental Research Needs for Water and Wastewater Treatment Systems" has been postponed until early fall. A proposal is being reviewed by National Science Foundation for joint sponsorship of the Conference by AEEP and NSF. The complete announcement of the Conference will be included in the next Newsletter.

The primary objective of the Conference will be to (1) provide a forum and focal point for the exchange of information on research needs between the academic community, users of the research, and granting agencies, (2) define and establish priorities for these research needs, and (3) disseminate the results of the Conference for the purpose of stimulating research in high priority areas. The major benefit expected from the Conference will be to bring to the attention of the government, academic and private sectors, the need for increased efforts in long term, fundamental research on water and wastewater treatment.

The formal announcement of the Conference, including registration materials, will be mailed to all AEEP members in early summer.

#### CONTINUING EDUCATION

INDUSTRIAL WASTEWATER CONTROL COURSE

Cornell University

June 13-14, 1977

A short course on the engineering control of industrial wastewaters will be given by Department of Environmental Engineering faculty and guests at the Cornell University College of Engineering, June 13-14, 1977.

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

Topics will include water pollution control legislation, regulations and standards; effluent monitoring; industrial wastewater disposal alternatives; effluent reclamation; biological and physical-chemical treatment process theory and applications; solids disposal; cost effectiveness of wastewater processes.

For further information, write to Professor R.H. Lance, Associate Dean, College of Engineering, Carpenter Hall, Cornell University, Ithaca, New York 14853.

The Gordon Research Conferences for the summer of 1977 will be held in New Hampshire and California.

The Conferences were established to stimulate research in universities, research foundations, and industrial laboratories. This purpose is achieved by an informal type of meeting consisting of scheduled speakers and discussion groups. Sufficient time is available to stimulate information discussion among the members of each Conference. Meetings are held in the morning and in the evenings, Monday through Friday, with the exception of Friday evening. The afternoons are available for recreation, reading, or participation in discussion groups, as the individual desires. This type of meeting is a valuable means of disseminating information and ideas to an extent that could not be achieved through the usual channels of publication and presentation at scientific meetings. In addition, scientists in related fields become acquainted and valuable associations are formed that often result in collaboration and cooperative efforts among laboratories.

It is hoped that each Conference will extend the frontiers of science by fostering a free and informal exchange of ideas among persons actively-interested in the subject under discussion. The purpose of the program is to bring experts up to date on the latest developments, to analyze the significance of these developments and to provoke suggestions concerning the underlying theories and profitable methods of approach for scientific research. The review of known information is not desired.

In order to protect individual rights and to promote discussion it is an established requirement of each Conference that no information presented is to be used without specific authorization of the individual making the contribution whether in formal presentation or in discussion. Scientific publications are not prepared as emanating from the Conferences. The recording of lectures by tapes, etc. and the photography of slides are prohibited.

Applications must be submitted in duplicate on the standard application form which may be obtained from the office of the Director.

A registration card will be mailed to those selected. Advance registration by mail for each conference is required and is completed upon receipt of the card and the deposit of \$30.00.

The complete program for the 1976 Gordon Research Conference is published in "Science," March 11, 1977. Reprints are available on request.

Dr. Alexander M. Cruickshank, Director Gordon Research Conferences Pastore Chemical Laboratory University of Rhode Island Kingston, Rhode Island 02881 Tel. 401-783-4011

Mail for the office of the Director from June 13 to August 26, 1977 should be addressed to:

Dr. Alexander M. Cruickshank, Director Gordon Research Conference Colby-Sawyer College New London, New Hanpshire 03257 Tel. 603-526-2870

Conference Fees (5 day conference, registration, room, meals, service.

New Hampshire - \$160.00 California - \$185.00

# ACADEMIC MARKETPLACE

#### POSITIONS AVAILABLE

University of Iowa

Applications are invited for TWO FACULTY POSITIONS at the Assistant Professor level, beginning September 1977. Both will be joint appointments between the Division of Energy Engineering and the Iowa Institute of Hydraulic Research. Ph.D. degree is required. Candidates are expected to participate in teaching at all levels (B.S., M.S., Ph.D. programs) and conduct research in their specialty area.

One position is available in the area of Water Resources Engineering and involves teaching and research in hydrology, stochastic hydrology, water resources systems and related areas. This position is in an interdisciplinary academic and research environment with strong supportive features. The successful applicant would initially assume existing teaching and research responsibilities and later develop his or her own in concert with the program in water resources.

The second position is in the area of Fluid Mechanics or Hydraulic Engineering. Candidate's primary interest should be in Civil Engineering aspects of fluid mechanics, such as hydraulic structures, river mechanics, thermal regimes of lakes and rivers (including ice). Applicant should be capable of conducting both laboratory and analytical studies. Some experience in a consulting office is desireable, but not essential.

Applications with a detailed resume and four references should be mailed prior to May 15, 1977 to: Faculty Search Committee, Iowa Institute of Hydraulic Research, University of Iowa, Iowa City, Iowa 52242.

The University of Iowa is an equal opportunity/affirmative action employer.

#### University of Kentucky

The Department of Civil Engineering at the University of Kentucky is seeking to fill a faculty position at the Assistant or Associate Professor rank. Applicants must have Ph.D. and at least one degree should be in Civil Engineering. Rank and salary will depend upon qualifications and experience. Appointment date of August 15, 1977 is desired, but a later date may be considered.

Applicants should have a background in the following areas as related to water resources systems: hydrology, modeling, planning, systems analysis, impact analysis, and engineering economy. The person filling this position will teach and conduct research in these areas.

The University is an Affirmative Action-Equal Opportunity Employer. Selection will be made on the basis of qualifications and without descrimination on any basis.

Resumes and salary requirements should be sent to:

Dr. Edward G. Foree
Chairman, Search Committee
Department of Civil Engineering
University of Kentucky
Lexington, Kentucky 40506

# University of Minnesota

FACULTY POSITION-ENVIRON-TENURED MENTAL ENGINEERING (WATER RESOURCES)-SEPT., 1977. A tenured position is available in the Department of Civil and Mineral Engineering, beginning preferably September 16, 1977, in the area of water supply and pollution control engineering, emphasizing water and wastewater treatment. Duties will include teaching at the undergraduate and graduate levels. A strong commitment to research is expected. Applicants with a B.S. degree in Engineering and Ph.D. in Environmental Engineering (Water Resources) are preferred. Please submit letter of application, resume and names of three professional references to Professor C. Fairhurst, Head, Department of Civil and Mineral Engineering, 112 Mines and Metallurgy Building, Minneapolis, Minnesota 55455. The University of Minnesota is an equal opportunity and affirmative action employer.

# North Dakota State University

The Civil Engineering Department of North Dakota State University has an opening for a full time position in the field of Sanitary Engineering. The professional rank and salary is open and depends on professional qualifications, education and experience.

Professional experience and a Masters Degree in Sanitary Engineering are required. A Ph.D. in Sanitary Engineering is desirable. A minor in Fluid Mechanics is also desirable but not required. Faculty member duties include undergraduate and graduate courses in Sanitary Engineering and Waste Resources, research activities in those areas and direction of M.S. student research.

The Civil Engineering Department has eight full time faculty positions and serves an enrollment of 160 undergraduate students and 15 graduate students. The Civil Engineering Faculty are active in teaching, research, extension, and consulting. The College of Engineering and Architecture has six departments with a combined enrollment of 1050 students.

North Dakota State University with an enrollment of about 7000 students in eight Colleges is located in Fargo, North Dakota.

Applicants should send their resume with three letters of recommendation and a transcript of their college work to:

Dr. James L. Jorgenson, Chairman Department of Civil Engineering North Dakota State University Fargo, North Dakota 58102

--AN EQUAL OPPORTUNITY EMPLOYER--

### Syracuse University

Assistant/Associate Professor of Civil Engineering. Salary is dependent upon candidate's qualifications. Candidate should have the following:

- Ph.D. or equivalent experience in Sanitary and/or Environmental Engineering;
- experience in design and research;
- ability to teach at undergraduate and graduate levels;
- strength in industrial waste treatment and biochemical reactions:
- an interest in water resources would be an asset; and
- an ability to develop research in one or more of the above areas.

Application Deadline: May 31, 1977

SYRACUSE UNIVERSITY OF AN AFFIRMATIVE ACTION EQUAL OPPORTUNITY EMPLOYER

Send Applications to:

Dr. J. Charles Jennett, Chairman
Department of Civil Engineering
150 Hinds Hall
Syracuse University
Syracuse, NY 13210

#### **AEEP PUBLICATIONS**

"The publications listed below are available from AEEP. Prepayment must accompany all orders; therefore, please forward a check or money order made payable to AEEP to:

Ms. Vickie Braimer
Center for Research in Water Resources
AEEP Publications
10,100 Burnet Road
Austin, Texas 78758

NOTE: The Order Form below must be completed and returned with your order. For orders of five or less volumes, include \$1.00 for postage; for orders for six or more volumes, include \$2.00. Federal Tax Identification Number:" **Environmental Engineering Unit Operations** and Unit Processes Manual . . . . . . . . . . . . . . . . . . \$12.00 Water Chemistry Laboratory Manual . . . . . . . . \$ 3.00 Register of Environmental Engineering Graduate Programs ..... \$ 3.00 Environmental Impact and Linkages, Workshop.... \$20.00 Mathematical Modeling in Environmental Engineering, Workshop......\$21.00 Interdisciplinary Education Programmes for Environmental Engineers, Workshop......\$10.00 Fundamentals of Chromatography, Workshop (limited supply).....\$10.00 Trends and Professional Manpower Production Capabilities in USA Educational Institutions (limited supply).....\$ 3.00 ORDER FORM I would like to receive \_\_\_\_\_copy(ies) of the publication(s) listed below. Enclosed is a check in the amount of \$\_\_\_\_\_ \*\*. This material should be mailed to: PUBLICATION(S):

<sup>\*\*</sup>Texas residents add 5% sales tax.

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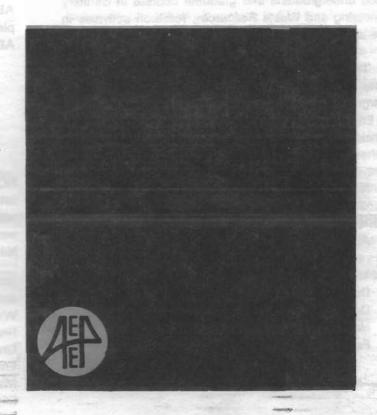
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