



**A E E P**

**NEWSLETTER**



CLEVELAND, OHIO, SITE OF WPCF CONFERENCE

ASSOCIATION OF ENVIRONMENTAL ENGINEERING PROFESSORS

OCTOBER, 1973

VOLUME 9, NUMBER 1

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**EDITORS' NOTES**

The fall season brings the start of another academic year and the opportunity for the profession to visit another of America's garden spots. AEEP members look forward to the Annual Conference of the Water Pollution Control Federation in Cleveland, September 30 to October 5, 1973. AEEP activities associated with the conference are outlined in this issue.

This issue represents the last edition produced under the present co-editors. The help and cooperation of the NEWSLETTER Committee, the AEEP officers and committee chairmen, and our co-workers at Virginia Tech during the past two years is gratefully acknowledged. We also take this opportunity to extend our best wishes to the new editor, Adnan Shindala of Mississippi State University, and look forward to his first issue in January, 1974.

FROM THE PRESIDENT'S DESK

All of the current problems in environmental engineering education were not solved at the Third National Environmental Engineering Conference in Philadelphia last month. It wasn't prudent to have imagined that they could be. Only prior manipulation or apathy could have assured unanimity.

The resolutions adopted on the last day of the conference probably represent a reasonable compromise of the diverse views aired in the earlier portion of the conference. The resolutions, then, may constitute an "average" view of the current and future course of environmental engineering education. Happily, individual opinions continue to range a long way in either direction from the average.

These are turbulent times in environmental engineering education, and a lively conference should have been anticipated. Ongoing changes in federal training support policies, federal deemphasis of fundamental research, spiraling manpower needs, increased public interest in environmental engineering problems, and movement of manpower from many disciplines into the environmental field, in addition to the factors perturbing all other fields of engineering education, created a timely setting for the conference.

A dilemma faced early in the conference was that, whereas environmental engineering educational needs are dependent upon future manpower requirements, it is exceedingly difficult to estimate those requirements. This area was, at least, not controversial, for no one claimed to have a much better crystal ball than anyone else.

Debates on the reports of the undergraduate and graduate committees were most controversial. One group felt that undergraduate programs could be tailored to allow a graduate with a B.S. degree to be prepared for a career in environmental engineering. Another faction felt that specialized intensive training in environmental engineering could only be handled adequately at the M.S. degree level.

Another area in which opinions differed concerned management training for environmental engineers. While there was agreement that environmental engineers frequently find themselves in managerial positions, opinions differed as to the merit of significantly altering curricula to provide academic management training.

Far more attention was given at the Philadelphia conference to continuing education and to the training of technicians and technologists than at previous national conferences. This is a reflection of the dramatic increases which have occurred in manpower requirements, and the fact that developments in continuing education and technician training areas further complicate the problem of assessing manpower requirements for more conventional environmental engineers. Most questions in the area of technician and technologist training centered on the four-year technologists. Some expressed doubt that this degree should be sandwiched between the two-year technician and the B.S. degrees.

A shortcoming of the conference was an occasional failure of the discussions to penetrate to the real source of controversy. The best example of this was in the B.S. vs. M.S. debates. While this subject received much attention, the real underlying question of what constitutes the essential ingredients of environmental engineering educational programs remained unanswered. Given the candor which characterizes discussions in our field, the basic issues would have been reached in time - but time was limited at Philadelphia.

I've asked the chairmen of the AEEP Education, Undergraduate Education, Continuing Education, and Technician and Operator Training Committees to follow-up on developments at the Conference in the area of their committee's concern. Before the dust settles on the Philadelphia meeting, the Board of Directors would like to have recommendations from the committees on desirable activities, policies or actions by AEEP.

Regardless of the final wording adopted for the conference resolutions or the recommendations of the AEEP committees, it is clear that not all environmental engineering educational programs will pursue the same course of action. Each will develop a program which best suits its needs, constraints, and resources, and best matches the philosophy of its faculty members. This is as it should be. A major purpose of the Third National Environmental Engineering Conference was to assist educators in adjusting their individual outlook on environmental engineering educational needs by providing a forum for expression of views on environmental engineering education, highlighting areas of controversy, and evaluating current trends. The conference served that function well.

. . . Richard I. Dick

#### AEEP ACTIVITIES AT WPCF MEETING IN CLEVELAND

##### Open Meeting Tuesday, October 2, at 8:30 p.m.

AEEP will hold an open meeting for all members and guests at 8:30 p.m., Tuesday, October 2, in the Lewis Room of the Sheraton-Cleveland Hotel.

##### AEEP Board Meeting Sunday, September 30, at 9:00 a.m.

The AEEP Board will meet at Cleveland on Sunday, September 30, at 9:00 a.m. in Parlor No. 34 of the Sheraton-Cleveland Hotel. Any AEEP member having an item for which the attention of the Board is desired should contact one of the members.

## WRAP-UP OF THE 3rd NATIONAL ENVIRONMENTAL ENGINEERING EDUCATION CONFERENCE

The 3rd National Environmental Engineering Education Conference, which was held at Drexel University in Philadelphia, Pennsylvania, August 13, 14, and 15, was well attended with over 100 educators present and participating. The attendees represented a variety of programs from most parts of the United States and Canada. The seven position papers prepared for the conference stimulated a lot of discussion and produced a lot of resolutions. The discussions were usually lively and uninhibited while resolutions were frequently followed by alternate resolutions. The climax of the meeting occurred the last day when more than 30 recommendations and resolutions, which had been initially prepared by the seven task forces and revised following conference discussion, were criticized, re-revised, and edited from the floor.

It seems quite likely that each attendee came away with a different evaluation of the success of the Conference, depending on his own opinion of what should have been accomplished. Two individual viewpoints concerning the Conference have been included in this Newsletter. One of the statements was prepared by AEEP President Richard Dick, and it can be found under the heading "From the President's Desk." The other statement was extracted from the Environmental Health Letter, and it follows these comments.

### ENVIRONMENTAL ENGINEERING EDUCATION CONFERENCE HIGHLY SUCCESSFUL:

The Third National Conference on Environmental Engineering Education at Drexel University August 13-15 proved successful beyond the hope of its sponsors, the American Academy of Environmental Engineers; Association of Environmental Engineering Professors, and Drexel.

The emphasis was somewhat different than that of the two previous conferences at Harvard and Northwestern.

For one thing, there was far more emphasis on undergraduate training. Implicit was the view that it was necessary to introduce the principles of environmental engineering at the undergraduate level and not wait until the student reached the School of Engineering.

There was also considerable emphasis on the need for continuing education of environmental engineers. The need to be brought up-to-date on the latest developments in the fast-growing field was evident.

From the outset, there was less talk of Federal financing than in the two previous meetings - for the very obvious reason that everyone agreed that Federal money would be more difficult to come by, and that it was a fact of life to be reckoned with at least for the immediate future. The talk was all on education; chairman P. Walton Purdom made sure of that.

The emphasis was also on teaching as opposed to the conventional forms of graduate school research which characterized previous meetings. A youth faculty group - composed in part of the gung-ho types rather than the grey-beards of yesteryear - was responsible for keeping the emphasis that way.

As expected, the position papers prepared for consideration of the conference (ENVIRONMENTAL HEALTH LETTER, August 1) met with considerable discussion and modification. That was all to the good. Out of the meeting came a series of recommendations which, together with the conference report expected in December, will guide the development of academic environmental engineering programs in the next few years.

The importance of a strong academic and occupational background was emphasized by Professor George P. Hanna of the University of Nebraska, who recommended that a master's degree be a minimum requirement for professional work in environmental engineering and that each graduate enter one of the four basic branches in the field (air quality, water quality, industrial hygiene and solid waste disposal) to develop a strong background in that specialty before attempting to study the over-all environment and its problems. Then, he said, only the outstanding specialists should be encouraged to become generalists.

#### SYMPOSIUM ON WASTEWATER TREATMENT IN COLD CLIMATES HELD

An international symposium in Saskatoon on research and treatment of wastewaters in cold climates attracted 200 registrants. The symposium, from August 22 to 24, was sponsored by the Institute for Northern Studies at the University of Saskatchewan and Environment Canada in co-operation with the Institute of Water Resources at the University of Alaska. Specialist from Canada, continental United States and Alaska, the USSR, Norway, Sweden, Denmark, and Finland were among the guest speakers. Registrants attended from Germany, Japan and France as well as from North America.

Professor Eric Davis, of the Department of Civil Engineering at the Saskatoon campus, said the objective of the symposium was to exchange information on the treatment of domestic and industrial wastes under severe winter conditions. Professor Davis, who co-ordinated the program, stated that vast areas of the world are subject to these conditions, which militate against the use of treatment methods developed for more temperate climates. The program dealt with the theoretical aspects, pilot plant experiments, and full-scale treatment facilities; and specific sessions concerned problems of waste water treatment in circumpolar countries, the operation of aerated stabilization ponds under low temperature conditions, large-scale aeration installations, vacuum systems, biological processes, disinfection of waste waters, and innovations.

Information about symposium proceedings, which are expected to be available shortly, may be obtained by getting in touch with Professor Eric Davis, Department of Civil Engineering, Department of Civil Engineering, University of Saskatchewan, Saskatoon.

CALL FOR PAPERS

ASCE-EED SPECIALTY CONFERENCE A call for papers relating to research, development and design studies in environmental engineering is being made for presentation at the annual Environmental Engineering Division Specialty Conference to be held at The Pennsylvania State University July 8-11, 1974.

Participation is encouraged on a division-wide basis in all areas of environmental engineering. Program areas will include but not be limited to: agricultural waste management; atmospheric pollution (including air pollution aspects of transportation systems; air pollution impact analysis); environmental quality management; solid waste management; sanitary engineering aspects of nuclear energy; thermal effects; industrial waste practice; urban wastewater engineering; wastewater treatment plant design; financing and charges for wastewater systems; water pollution control planning; water purification and environmental engineering manpower development.

Abstracts containing Title, Author and affiliation, and a summary not to exceed 500 words should be sent no later than October 15, 1973, to:

Dr. Raymond W. Regan  
Program Chairman  
Civil Engineering Department  
212 Sackett Building  
The Pennsylvania State University  
University Park, Pa. 16802

THIRD AWWA UNIVERSITIES FORUM Abstracts of student papers are solicited for the 1974 AWWA Conference to be held at Boston, Massachusetts, June 16-21, 1974. The papers should be (1) actual research conducted by the student, (2) a state-of-the-art survey, (3) a proposition paper which discloses some facet of water treatment and water research or analysis pertaining to water-quality control and surveillance or water-resource development and management, including economic and user attitudes. Papers should relate to Municipal, Agricultural or Industrial water supply problems and should not be co-authored by faculty. Submission of papers resulting from late-stage doctoral research are not being encouraged at the present time.

Five copies of a two-page abstract of approximately 500 words, preferably containing figures and tables, should be submitted by December 11, 1973, to:

Dr. Roger A. Minear  
Associate Professor  
Department of Civil Engineering  
The University of Tennessee  
Knoxville, Tennessee 37916

Paper evaluation will be made by a subcommittee of the AWWA Student Activities Committee during December and notification of selection for the program will be made in January.



PARIS INTERNATIONAL CONFERENCE The 1974 conference of the International Association of Water Pollution Research (IAWPR) will be held in Paris, France, on September 9-13, 1974. The program will consist of papers on a broad range of topics, including water quality standards, legal and administrative problems, wastewater treatment technology, and research on pollution effects. The program will also include workshop sessions at which invited authors will give papers on wastewater disposal by pipeline, rural wastewater disposal, sludge disposal, water re-use, technology transfer, biological pollution parameters, monitoring, and disinfection. Post conference visits and tours will be arranged.

Authors are invited to submit completed papers of not more than 5,000 words prior to November 7, 1973, to:

S. H. Jenkins, Committee Chairman  
c/o 156/170 Newhall Street  
Birmingham, B3 1SE  
England

FOURTH ANNUAL LOUISVILLE CONFERENCE. The Fourth Annual Environmental Engineering and Science Conference at the University of Louisville will be held March 4-5, 1974. The meeting will serve to analyze the status of our present environmental problems and to present pragmatic solutions to these problems based on professional input from an interdisciplinary and inter-society viewpoint. Topics to be discussed will include water quality, air quality, environmental impact analysis, solid waste disposal, resource recovery, noise pollution, occupational health, environmental planning, and environmental law, as related specifically to academic, governmental, and industrial personnel, who are confronted with environmental decisions on a daily basis.

Submission of five copies of a 500-word abstract is required before November 1, 1973. The abstract should include a concise statement of the problem or objective covered, an indication of the method of approach, a statement of data developed in the study, and a summary of important conclusions. Authors are urged to submit their material at an early date for consideration. Authors will be informed of acceptance no later than December 1, 1973. Complete papers are required for final review by March 1, 1974, for inclusion in the conference proceedings.

Abstracts and related correspondence should be addressed to:

Dr. Joseph L. Pavoni  
Department of Civil Engineering  
Speed Scientific School  
University of Louisville  
Louisville, Kentucky 40208

### SHUVAL NAMED 1974 AEEP DISTINGUISHED FOREIGN LECTURER

Chairman Bill Jewell has announced that the AEEP foreign lecturer committee has received word that its nominee, Professor Hillel I. Shuval, has accepted our invitation. Professor Shuval is planning to visit in the U.S. for a two week period during his semester break, January 9 to 23.

The tentative titles of three lectures which are being considered for presentation are:

1. Control of Viruses in the Water Environment
2. Wastewater Renovation and Reuse
3. Water Quality Management in a Semi-Arid Zone: Israel as a Case Study

Professor Shuval is presently an Associate Professor of Environmental Health Engineering at the Hebrew University in Jerusalem. He received his education at Cornell University, University of Missouri, and the University of Michigan and specialized in Civil and Environmental Health Engineering. Among his many appointments, he has held the following positions: Chief Health Engineer and Director of the Division of Environmental Health in Israel, Design Engineer with Metcalf and Eddy, Visiting Professor at the Universities of Michigan and Massachusetts, and President of the 1972 International Conference on Water Pollution Research in Jerusalem.

Further information on Professor Shuval's visit including details regarding requesting participation by individual programs may be obtained from Dr. William J. Jewell, Riley - Robb Hall, Cornell University, Ithaca, New York 14850.

### NOVOTNY JOINS MARQUETTE FACULTY

Dr. Vladimir Novotny will be joining the faculty of Marquette University this Fall to teach and conduct research in Environmental Engineering. Dr. Novotny is a Diploma Engineer in Sanitary Engineering from Technical University of Brno, Czechoslovakia, a Candidate of Science in Sanitary and Water Resources Engineering from Technical University of Brno and Czechoslovak Academy of Science, and holds a Ph.D. from Vanderbilt University. He has seven years experience as a research engineer at the Hydraulic Research Institute in Brno and was acting head of the branch institute from 1966-1967. Recently Dr. Novotny was a Project Engineer with Associated Water and Air Resources Engineering in Nashville, Tennessee. He has written numerous publications in both Mathematical Modeling of Water Quality Changes and heat transfer in flowing streams. At Marquette University, Dr. Novotny will be teaching undergraduate and graduate Environmental Engineering courses and conducting research.

POSITIONS AVAILABLE

MICHIGAN TECH SEEKS ASSISTANT OR ASSOCIATE PROFESSOR IN ENVIRONMENTAL ENGINEERING. Ph.D. required; teach undergraduate and graduate courses in water and wastewater treatment, solid waste disposal, hydraulics and hydrology. Expected to engage in research activities or has demonstrated ability to secure research grants. Position available August 27, 1973 or as soon thereafter as practicable. Send resume' in confidence to Dr. George K. Wadlin, Head, Civil Engineering Department, Michigan Technological University, Houghton, Michigan 49931. An Equal Opportunity Employer.

UNIVERSITY OF CALIFORNIA, IRVINE WANTS WATER RESOURCES ENGINEER. Assistant Professor: Opening available immediately in Civil and Environmental Engineering. Ph.D. required. Emphasis in water resources engineering including hydraulics, hydrology and planning of water resources systems desirable. Interest in transportation planning, urban systems or related environmentally oriented subjects will receive special consideration. Must be able to fit into an environmentally oriented CE program. Teaching duties may include fluid mechanics, hydraulics laboratory, soil mechanics as well as courses in the specialty. Professional registration and industrial experience is highly desirable. Applicant will be expected to attract research funds and guide graduate students at both the M.S. and Ph.D. levels. Send curriculum vitae to: Chairman, Environmental & Resources Engineering, University of California, Irvine, CA 92664. Minorities and women are encouraged to apply.

CAPE TOWN ANNOUNCES SENIOR LECTURER POSITION. Applications are invited for the post of Senior Lecturer in Water Resources and Public Health Engineering in the Department of Civil Engineering at the University of Cape Town from January 1, 1974. The applicant must hold a Ph.D. in a field related to the control of water quality. An interest in Coordination Chemistry will be a strong recommendation. The appointment will be made on the scale R6300 x 300 - 8100 per annum (according to qualifications and experience) plus a pensionable allowance of 15 percent of basic salary. Applicants should submit a curriculum vitae, stating present salary, the date on which they could assume duties, and giving the names and addresses of three referees (preferably persons with recent familiarity with the applicant's activities). Further information should be obtained from the Registrar, University of Cape Town, Private Bag, Rondebosch, C. P., to whom applications should be submitted by October 15, 1973. Appointment will be subject to a satisfactory medical certificate. The University reserves the right to appoint a person other than one of the applicants, or to make no appointment.

DUKE SEEKS INTERDISCIPLINARY ENVIRONMENTAL PROGRAM COORDINATOR. The Duke University Environmental Center is seeking a person with experience in university teaching, research and administration to coordinate and develop an undergraduate and graduate interdisciplinary environmental training program. The appointment will be at the Associate Professor level on an eleven month basis and could be effective as early as January 1, 1974. For information write Dr. Boyd R. Strain, Duke Environmental Center, Duke University, Durham, North Carolina, 27706.

MICHIGAN STATE WATER RESEARCH CENTER WANTS ENVIRONMENTAL ENGINEER. The Institute of Water Research at Michigan State is seeking the services of an environmental engineer at the Assistant or Associate Professor level. The applicant must have an earned Doctorate Degree in Civil, Sanitary, or Environmental Engineering with interests and/or background in biology. Experience beyond the doctorate is desirable but not essential. The applicant should be able to document a strong potential or demonstrated competence in environmental engineering research, preferably in an area relating to wastewater recycling. For information write Robert C. Ball, Director, Institute of Water Research, 334 Natural Resources Building, Michigan State University, East Lansing, Michigan 48823.

ILLINOIS TECH TO ADD TWO FACULTY. The Department of Environmental Engineering at Illinois Tech has two faculty positions available at the assistant or associate professor level, effective January or September, 1974. Both positions involve graduate and undergraduate teaching responsibilities. One position is for an aquatic environmental chemist, with a strong analytical chemistry background. The other position is for an environmental engineer, with interests in processes of water and wastewater treatment. Requirements are flexible regarding background and specific interests of prospective applicants. Resumes should be submitted to Dr. James W. Patterson, Chairman, Department of Environmental Engineering, Illinois Institute of Technology, Chicago, Illinois 60616.

HOUSTON SEEKS CIVIL/ENVIRONMENTAL ENGINEER. The Department of Civil Engineering at the University of Houston will have a position available in January of 1974 for a person with B.S.C.E., M.S., and Ph.D. degrees (environmental with teaching interests in water quality laboratory courses, municipal and industrial waste treatment, and possible solid waste management. Contact Dr. Ardis White, Chairman, Department of Civil Engineering, University of Houston, Houston, Texas 77004 (713-749-4481).

UCOWRR MEETS IN TEXAS

A total of 10 "action" resolutions were passed by the Universities Council on Water Resources (UCOWR) at its Lubbock, Texas meeting this summer. UCOWR is an organization of universities which has been established to encourage education and research into the nation's water resources. Numbering some 77 members, the organization meets annually at a member university for a two to three-day session of learning and workshops. At this summer's meeting at Texas Tech University, in Lubbock, Texas, the group discussed and passed a variety of resolutions on such topics as multi-objective water resources planning techniques, storage and retrieval of water resources abstracts, support of the Safe Water Drinking Act of 1973, commendation of the National Water Commission Report and development of techniques to assess manpower needs in the water resources field.

Further information regarding these resolutions or regarding UCOWR itself may be obtained from Warren Viessman, Jr., Executive Secretary, UCOWR, University of Nebraska, Water Resources Research Institute, 212 Agricultural Engineering, East Campus, Lincoln, Nebraska 68503.

MEETINGS, CONFERENCES AND SHORT COURSESPRETREATMENT OF INDUSTRIAL WASTEWATERS FOR DISCHARGE INTO MUNICIPAL SEWERS.

This course will be presented by Associated Water and Air Resource Engineers, Inc. (AWARE) on September 29-30, 1973, immediately preceding the Water Pollution Control Federation annual conference in Cleveland, Ohio. This course 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 be discussed by a representative of the Environmental Protection Agency.

The seminar will be held at the Sheraton-Cleveland Hotel in Cleveland, Ohio. The registration fee will be \$150 per person. Further information may be obtained by contacting: Professor W. Wesley Eckenfelder, Jr., AWARE, Inc. 2002 Richard Jones Road, Suite C-305, Nashville, Tennessee 37215.

ADVANCED WATER POLLUTION CONTROL: PHYSICAL AND CHEMICAL TREATMENT. This course will be presented October 15-19, 1973, at the University of Texas at Austin. The objective of this course is for participants to learn the fundamentals of physical and chemical methods of treatment, which will serve as a framework in the analysis, design and operation of waste treatment facilities. The best practicable and best available technologies are identified in addressing the goals of the Water Quality Act of 1972. Contact: Dr. J. F. Maline, Jr. Professor Civil Engineering, The University of Texas at Austin, Austin, Texas 78712.

GROUNDWATER POLLUTION. This course will be presented on November 6-8, 1973, at The Commodore Hotel, New York City. WREES (Water Resources Engineering Educational Series) programs are planned to meet the continuing educational needs of professional personnel working in the water resources field. These programs have been offered for several years on the West Coast by Continuing Education in Engineering, University of California Extension, Berkeley. This WREES program, originally presented in San Francisco in January 1973, is being offered on the East Coast in response to the strong current interest in underground water pollution. Arrangements for presentation of the program have been made by University Extension in cooperation with Geraghty & Miller, Inc., Port Washington, New York. Faculty Member in Charge is David K. Todd, Professor of Civil Engineering and Chairman, Division of Hydraulic and Sanitary Engineering, University of California, Berkeley. For further information please write Continuing Education in Engineering, University Extension, University of California, 2223 Fulton Street, Berkeley, California 94720.

SIXTH MID-ATLANTIC INDUSTRIAL WASTE CONFERENCE. This conference, which is sponsored by universities and pollution control agencies in the mid-Atlantic region, will be held at the University of Delaware, Newark, Delaware, on November 14-15, 1973. For information, contact Richard I. Dick, Professor of Civil Engineering, University of Delaware, Newark, Delaware 19711.

FIRST INTERNATIONAL SYMPOSIUM AND EXPOSITION ON OZONE FOR WATER AND WASTE-WATER TREATMENT. This conference will be held on December 2-5, 1973, at the Sheraton Park Hotel, Washington, D.C. Details of this First International Symposium & Exposition are available from the sponsor: International Ozone Institute, 24 Central Avenue, Waterbury, CT 06702.

## NYU ENGINEERING SCHOOL MERGES WITH BROOKLYN POLY

On September 1, 1973, the New York University School of Engineering and Science merged with the Polytechnic Institute of Brooklyn to form a new institution--the Polytechnic Institute of New York (PINY). The merger of the two engineering schools brings to the New York metropolitan area an in-depth broadening of the environmental efforts of both schools. The environmental areas at the new institution will continue to be water quality engineering, air resources engineering and solid waste management.

This program is the only full-time program in the New York City metropolitan area which offers training up to the doctoral and post-doctoral level in the environmental engineering area of water, air and solid waste. In addition to the full-time program, there is also a part-time program allowing people with full-time employment to study part-time towards an MS degree. Classes are held in the day and evening.

The site of the major effort is the old Polytechnic Institute of Brooklyn campus, about five blocks from the Brooklyn Bridge, in the heart of the metropolitan area. By virtue of this location, and ready accessibility by public transportation, the metropolitan student will now have available to him courses dealing with all types of environmental problems as well as laboratory and field facilities. Since all levels of government (city, state and federal) concerned with the environment have their offices in close proximity, it is possible to more closely interact with governmental officials with regard to planning and thinking.

- A. H. Molof

## FORMATION OF INTERNATIONAL OZONE INSTITUTE ANNOUNCED

Until the recent renaissance of interest in the potentials of ozone as a viable alternative treatment system, there has been little incentive for scientists to conduct investigations involving ozone--and the advancement of ozone technology has been retarded accordingly. With the reawakening of the environmental community to the potential benefits of applying ozone technology, it is now quite apparent that there should be available to all concerned and interested parties a central forum for the gathering and dissemination of information pertaining to the technology of ozone and related oxygen species.

Accordingly, the Environmental Protection Research Institute, Inc., is pleased to announce the formation of the INTERNATIONAL OZONE INSTITUTE, an Association of scientists, engineers and industrial organizations interested in promulgating the technology of ozone and related oxygen species sciences. A not-for-profit scientific and educational organization, IOI was founded to represent the interests of environmental and other scientific communities, engineers, users, manufacturers of ozone generation and contacting equipment, ozone analyzers, monitors and control equipment, as well as the interests of various supporting industries and professions. The Institute will serve as a focal point for information collection and dissemination, and plans to conduct conferences, workshops and seminars, publish newsletters and bulletins, and develop educational materials. For information write International Ozone Institute, 24 Central Avenue, Waterbury, Connecticut 06702.

OWRR ISSUES CALL FOR TITLE II PROPOSALS

The Office of Water Resources Research, U. S. Department of the Interior, Washington, D.C. 20240, is now accepting unsolicited research proposals in the field of water resources for consideration for fiscal year 1975 support, beginning July 1, 1974, pursuant to Title 11 of the Water Resources Research Act of 1964, as amended.

Within the broad research program authorized by Congress, the Office of Water Resources Research desires to encourage and support research investigations which hold promise of contributing to the solution of important water problems. In its fiscal year 1975 program, the Office of Water Resources Research proposes to emphasize support of research in these major subject fields: Improvement of water resources planning, managerial, financial, operating, and regulatory policies; Water resources policy and political institutions; Hydrologic systems analysis; Urban and metropolitan water resources problems; Ecologic aspects and environmental consideration of water resources planning and management; Evaluation of economic importance of various uses of water, cost allocation, cost sharing, pricing, and repayment; Analysis and evaluation of water resources projects; Ground-water supply, management and protection; Protection and rehabilitation of estuarine resources; Thermal loading problems; and Water demand considerations.

Further information can be obtained by writing the Director, Office of Water Resources Research, U.S. Department of the Interior, Washington, D. C. 20240.

Please detach and mail to:

Paul H. King, Co-Editor  
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Name: \_\_\_\_\_

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Mailing address: \_\_\_\_\_

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\_\_\_\_\_ change of address

\_\_\_\_\_ add above individual (s) to mailing list

\_\_\_\_\_ remove me from mailing list

\_\_\_\_\_ send to above individual and remove my name

\_\_\_\_\_ would like to join AEEP

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\_\_\_\_\_ continue to send Newsletter