

# AAPSE

## NEWSLETTER

AMERICAN ASSOCIATION OF PROFESSORS IN SANITARY ENGINEERING

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Vol. 2, No. 2

November, 1966

"And Noah he often said to his wife  
when he sat down to dine  
I don't care where the water goes  
if it doesn't get into the wine."

--G. K. Chesterton

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## MCCARTY RECEIVES FIRST AWARD FOR EXCELLENCE

Dr. Perry L. McCarty, Associate Professor of Civil Engineering at Stanford University has been selected to receive the Award for Excellence in Sanitary Engineering Education for 1966. An award plaque and a check for \$1,000 will be presented to Professor McCarty at the next meeting of AAPSE, which will be held at Lafayette, Indiana at the time of the Purdue Industrial Waste Conference. The award is made biennially and is funded jointly by AAPSE and Engineering Science, Inc.

The purpose of the award is to recognize outstanding teaching, research, leadership, and public service by professors principally engaged in the teaching of water science and engineering who are age thirty-seven or under, who have published scholarly papers in recognized journals, and who have demonstrated outstanding professional works and leadership.

The Award Committee reviewed an impressive list of nominations and recommended to the Board of Directors that the award be presented to Dr. McCarty. The Board unanimously approved the recommendation at the meeting in Kansas City and the selection was first announced at the Open Meeting of AAPSE that same evening.

Newsletter readers are surely familiar with Perry McCarty's outstanding contributions to our field. Our congratulations go to him and our thanks go to Dr. Harvey Ludwig for making it possible for outstanding young educators in this field to be recognized and encouraged.

## OPEN MEETING OF AAPSE IN KANSAS CITY

An open meeting of the AAPSE membership and others interested in knowing more about the forthcoming activities of the Federal Water Pollution Control Administration in relation to sanitary engineering education was held at 8:00 p.m. on September 27, 1966 in the Muehlenbach Hotel in Kansas City, Missouri. The wide interest in this program was reflected by the attendance of about 80 people which filled the meeting room to the extent that the feature speaker was playing to a standing room audience.

Mr. John Barnhill, new Deputy Commissioner of the Federal Water Pollution Control Administration, was the feature speaker. He discussed the manpower needs of the Administration, particularly for engineers trained in management.

The business meeting included reports of AAPSE Committees of their work on the Register of Educational Facilities, AAPSE Workshops, the Education Conference, and the AAPSE Award.

The next AAPSE meeting is scheduled to be held at Lafayette, Indiana in May 1967.

## AAPSE WORKSHOP ON INSTRUMENTATION

Instrumental Methodology and Its Application in Sanitary Engineering is the subject of another workshop being planned by AAPSE for Sanitary Engineering educators. Professor Donald R. Washington will be Chairman for this Second Workshop. The format

will be similar to the Workshop held last June on Lake Travis near Austin, Texas. Registration will be limited to 40 Sanitary Engineering Educators who will gather to discuss principles, concepts, and applications of instrumentation in sanitary engineering laboratory instruction and research. It is planned to hold a Workshop at a resort location where all the participants can relax in an atmosphere of congeniality. Professor Washington would welcome invitations from schools that would like to host this Workshop or suggestions from sanitary engineering educators regarding suitable location.

It has been announced by Professor Eckenfelder that some of the Workshop notes which were prepared for the Workshop on Biological Waste Treatment Processes held at Lake Travis in June 1966 are available and will be sold to members of AAPSE for \$5 or to nonmembers for \$10. This Workshop, described in the AAPSE Newsletter in September 1966, was highly successful and these notes contain a great deal of practicable, "nuts and bolts" discussion of equipment and apparatus for use in teaching laboratory instruction on biological waste treatment.

## LEGISLATIVE ANALYSIS

by

Fred J. Burgess

### CONFEREES REACH AGREEMENT - §

On October 17, 1966, the House and Senate Conferees reached agreement on the Water Pollution Control appropriation for 1966 at a whopping \$3.7 billion dollars, much of which goes to construction grants. The appropriation includes an expanded program of intramural research with some modest additions for the extra-mural programs at universities.

### A STITCH IN TIME

Senator Edmund Muskie (D-Maine), Chairman of the Senate Public Works Committee, in a recent visit to Oregon State University, Corvallis, Oregon, expressed an interest in obtaining the views of Sanitary Engineers on research and training needs to support the Nation's water pollution control effort.

AAPSE Members are encouraged to write Senator Muskie to express their opinions. The basic issue is that while the Nation's effort in water pollution control has increased by several orders of magnitude, the appropriations for research and training grants at universities has failed to keep pace.

Legislators are apparently overlooking the fact that the water and air pollution control efforts are seriously limited by manpower. In fact the success or failure of the present programs will be determined by the energy and imagination of the available manpower to as great an extent as it will by the millions of dollars of support Congress pours into construction grant projects. What Congress is overlooking is that a project built today will be obsolete in 10 to 15 years, but a dedicated worker trained today at age 30 will continue to serve for at least 35 years.

Senator Muskie also expressed concern for the training of technical personnel such as sewage plant operators and others who must operate the complex multi-million dollar installations being provided with public funds. If AAPSE Members want to

contribute to this effort, I suggest they write to Senator Edmund A. Muskie and/or to their own congressional delegation.

J.L. AGEE APPOINTED TO WATER QUALITY STANDARDS POST

James L. Agee, BS, Oregon State University, 1952, M.S. Harvard University, 1956, has been appointed Chief Engineer of the Water Quality Standards group, FWPCA.

Mr. Agee brings to this position 13 years of professional experience and a great deal of mature professional judgement. He is an astute individual who is receptive to qualified viewpoints. AAPSE members who are interested in this issue are encouraged to express their views to him.

LEARN BABY, LEARN

It is not possible for the AAPSE Legislative Analysis Committee to inform the membership of current legislative news. Members should arrange for their university to subscribe to one or more of the following news services that announce legislative news as and when it happens.

1. Water Control News - Published weekly by Commerce Clearing House, Inc., 4025 W. Peterson Ave., Chicago, Illinois, \$48/year.
2. Environmental Health Letter, Gershon W. Fishbein, Publisher, National Press Building, Washington, D.C. 20004. Published twice a month. Rate: \$50/year; \$30/six months. Includes Section on Abstracts with engraved binder for permanent filing.
3. Air/Water Pollution Report, Leonard A. Eiserer, Editor & Publisher, Business Publishers, Inc., P.O. Box 1067, Blair Station, Silver Spring, Md. Rate: \$48/year; \$30/six months. Published twice a month.
4. Water Newsletter, Published monthly by Water Information Center, Inc., 44 Sintsink Drive East, Port Washington, L.I., New York, Subscription rates on request.
5. Water Desalination Report, Richard Arlen Smith, Publisher-Editor, 1732 Church St., N.W., Washington, D.C., 20036. Rate: \$125/year.
6. NSPE News Letter, sent automatically to NSPE Members.
7. FWPCA Legislative Memorandum. Sent to the Regional Offices each week by Murray Stein.
8. Air and Water News, Published weekly by McGraw-Hill, Inc., 330 West 42nd Street, New York, N.Y. 10036. Rate: \$90/year.
9. Water in the News, Published monthly by Soap and Detergent Association, 40 East 41st St., New York, N.Y. 10017.
10. The Conservation Foundation Letter, Published by the Conservation Foundation, 1250 Connecticut Ave., N.W., Washington, D.C. 20036.
11. UCOWR Newsletter, Published monthly by the Universities Council on Water Resources, Request for copies may be sent to Mr. Wm. S. Butcher, Executive Secretary, UCOWR, Water Resources Center, University of California, Los Angeles, California 90024.
12. The Water Resources Newsletter, Published monthly by the American Water Resources Association, St. Anthony Falls Hydraulic Laboratory, Mississippi River at Third Ave., S.E., Minneapolis, Minn., 55414. Subscription: \$2/year for nonmembers.

## CLEAN WATERS ACT PROVIDES FOR RESEARCH AND DEVELOPMENT

In the \$3.7 billion Clean Waters Restoration Act of 1966, an additional \$308 million was provided for research and demonstration grants in water pollution. The bill authorized Congress to appropriate \$20 million per year for three years for projects on preventing industrial waste pollution, \$20 million each year for developing methods of controlling storm water pollution, and \$20 million each year for projects which demonstrate advanced waste treatment and water purification methods. The law also provides for \$125 million for training and for augmenting state programs and \$3 million for a Department of the Interior study of estuarine pollution.

A major provision of the Act is to significantly increase Federal aid to municipalities for waste treatment facilities construction. It removes dollar ceilings on grants to eliminate the previous limitations which applied to large plants. It also increases the level of support in some cases and encourages state participation and river basin planning. The Water Pollution Control Administration will now be able to grant up to 30% on any project; 40% if the state contributes 30%; and as much as 50% if the state contributes 25% and agrees to impose quality standards on navigable intra-state streams. Under a bonus system encouraging comprehensive planning rather than a fragmented approach, the Federal share could increase to 55%.

Other provisions strengthen enforcement regulations, encourage joint industrial-municipal waste treatment.

## ACS TO PUBLISH NEW JOURNAL

by

J. T. O'Connor

The announcement of a new journal by a major scientific organization is always an event of great importance, although many will groan at the thought of still another repository of articles and information to add to the clutter of our libraries, offices and laboratories. However, each new competitor for our reading time and attention should be examined carefully to determine whether it deserves a place on our shelves. This new journal, we feel, has much to recommend it.

To begin with, the new journal will be published under the auspices of the American Chemical Society, an organization great in size and reputation, and well known for the quality of its publications. In addition, the new journal will provide an outlet for those scientists who, while concerned with "environmental" problems, feel that their work is inappropriately housed in the existing journals in our field. (It is not hard to imagine, for example, that a chemist would prefer to publish a paper in an ACS, rather than an ASCE, publication.) Most important, the new journal might be considered a bid, on the part of the chemists, for greater recognition of their interests in and contributions to the study of the "environment." Few could argue that they are not entitled to such recognition.

There are the usual obstacles to success for the new journal. Will there be enough subscribers to support it? Will there be enough contributors to provide the editors with the choice of articles necessary for a quality journal? Will the journal contents overlap with that of existing journals? Will the journal be readable and communicative?

The promotional literature heralding the January 1967 arrival of the journal outlines the aims of the new publication:

1. It is designed for the "scientist and engineer concerned with the technical aspects of water, air, and waste chemistry."
2. It will provide "authoritative news, interpretive reports, and in-depth commentary on the political aspects of this growing field of interest to governmental, university and industrial officials...."
3. It will try to give "the widest coverage attempted by any publication in the field of environmental science and technology."
4. It will present "theoretical studies and experimental results ... the views of authoritative leaders ... concurrent coverage of other publications ... reports of scientific and technical meetings ... review and survey papers in related fields ... broad coverage of governmental activities."
5. It is the "only publication, then, specifically designed to cover all areas of water, air, and waste chemistry at every level of understanding needed by the scientist, the engineer, and the literate, involved layman."

The promises are great.

The Journal is called, not the Journal of Air, Water, and Waste Chemistry as might have been expected, but "Environmental Science and Technology."

The editor is Dr. James J. Morgan, Associate Professor of Environmental Health Engineering, Cal Tech.

We wish him a Happy New Year.

#### TWO NEW DEPARTMENTS FORMED

Two universities in the United States have recently announced the formation of new departments; each of which is engaged in activities that are generally considered related to sanitary engineering. It is interesting to note that organization of these new departments reflects at the same time the importance attached to these fields by Colleges of Engineering on the one hand, and the differences in emphasis being given the subject by different institutions on the other hand.

The College of Engineering at Cornell University announces the formation of a Department of Water Resources Engineering. This new department will unify graduate and undergraduate teaching and research activities in fluid mechanics, hydraulics, hydrology, air and water resources engineering, sanitary engineering, and water resources planning and management. The new department will implement Cornell's increasing commitment to advanced study and research in these areas. Theoretical and experimental aspects of fundamental phenomena, process and system design, the application of mathematical modeling, digital computer techniques, economic theory and systems analysis methodology will be applied to problems and design and control of environmental and water resource systems. Charles B. Gates, Professor of Civil Engineering at Cornell, has been named Chairman of the new department that has a faculty of nine and 25 graduate students.

The establishment of **the Department of Environmental Engineering** at Illinois Institute of Technology has been **announced by Dr. Ralph G. Owens, Dean of the IIT College of Engineering and Physical Science.** The new department will grant graduate degrees, both M.S. and Ph.D. "Departmental status," Owens said, "is a recognition of the rapid growth in this field at IIT within the Department of Civil Engineering, in students, faculty, courses and research, and of the increasing significance of environmental engineering at the national level and the local areas." The new department will continue IIT's emphasis on water supply and air and water pollution control (sanitary engineering) and will expand into other engineering aspects of environmental control as the need and the facilities grow.

Dr. C. Fred Gurnham, Professor of Civil Engineering and Chemical Engineering, has been named Chairman of the Department of Environmental Engineering. Other members of the faculty of this new department are **Dr. Robert B. Grieves, Associate Professor and Dr. Clifford J. Crandall, who has recently been appointed as an assistant professor.** According to Professor Gurnham, the new department expects to draw most of its graduate students from among undergraduates majoring in civil or chemical engineering, although some will come from the physical and biological sciences. More than 40 graduate students have enrolled in the courses offered by the new department this fall.

#### TWO RECENT AAPSE BOARD MEETINGS

The AAPSE Board of Directors held a special meeting in Munich, Germany on September 6, 1966 at 4:30 p.m. One of the principal activities of this meeting was to plan the open meeting of AAPSE at Kansas City on September 27. President E. F. Gloyna also discussed his correspondence with Secretary Udall of the Department of the Interior concerning joint meetings of members of the AAPSE Board and members of the staff of Secretary Udall. President Gloyna indicated that a mutually satisfactory date for such a meeting was being determined.

Discussion of eligibility of engineering educators for membership in AAPSE was discussed and consideration was given to a request from Dr. Max Katz to have AAPSE join in sponsoring a Fisheries Biology Conference. A sub-Committee consisting of E. A. Pearson (Chairman), R. S. Engelbrecht, Max Katz, and D. J. O'Connor was appointed to look into the matter and make a recommendation to the Board at a later meeting.

Professor Eckenfelder reported on the activities of the International Invitation Committee, which is charged with making arrangements for outstanding foreign visitors to come to the United States by arranging possible trips to universities to present seminars and to inspect facilities. Professor Eckenfelder then reported on the International Water Pollution Research Association. Extensive discussion was held concerning the American representation for this International Association.

Another meeting of the Board of Directors was held in the Municipal Auditorium in Kansas City on September 27 at 9:00 a.m. The first item discussed was the progress being made on the publication of the Register. The Board approved the printing of the 300 copies of the Register and authorized the expenditure of an additional \$400 over the \$1500 already authorized. The co-sponsoring organization is the Environmental Engineering Intersociety Board (EEIB).

A report was made concerning the cooperative effort of AAPSE and EEIB in scheduling an Education Conference, which is now set for September 6, 7, and 8, 1967 at Northwestern University. President Gloyna reported on efforts being made to generate

Public Health Service support for a joint effort by AAPSE and EEIB to collect statistical data on sanitary engineering education. A report of such a study is being prepared in draft form by Professors Kaufman, Rich, and Purdom. The Board approved a proposal to have the Education Committee prepare a proposal for a comprehensive study of training programs, research grants, administration grants, research facilities, etc. for submittal to the Water Pollution Control Administration or the U.S. Public Health Service - N.I.H. Environmental Science group.

Further business of the Board included a review of last years workshop session and plans for another workshop in 1967. The report of the Awards Committee was received by the Board and selection was made by the Board of the recipient for this year's Award. Both these activities are discussed in related stories in the Newsletter.

Professor D. J. O'Connor reported on the progress of the Research Committee which was asked to make a catalog of research funds available in sanitary engineering. He reported that the data has been collected and analyzed and he was instructed by the Board to proceed with preparation of a preliminary draft. Other items discussed by the Board included relationships with other professional organizations, the means of bringing legislative information to the attention of members, the matter of eligibility for membership in AAPSE, the participation of AAPSE in the International Water Pollution Conference.

#### NAE ADVISORY COMMITTEE ON POLLUTION POLICY

The National Academy of Engineering has appointed an Advisory Committee to consider questions of public policy in air and water pollution to guide the Academy in advising the Federal Government. The Committee's function is similar to that of the Science and Public Policy Committee of the National Academy of Science. The Committee will be concerned with water pollution, water resources, solid waste disposal, air pollution, and high speed transportation. Chairman of the Committee will be Dean Chauncey Starr, University of California, Los Angeles.

#### AAPSE MEMBERSHIP GROWS

As of September 18, 1966, the membership of AAPSE had grown to 51 members, who are faculty members of 38 different colleges and universities. At least two additional members have joined the Association since the Kansas City meeting, making the current membership 53.

#### SANITARY ENGINEERING CONFERENCE AT URBANA

"Instrumentation, Control and Automation for Water Supply and Waste Water Treatment Systems" is the title of the Ninth Sanitary Engineering Conference to be held in Urbana, Illinois on February 7 and 8, 1967. This Conference is planned for sanitary engineers in government, industry, or in private practice, and for water works managers and operators. The Division of Sanitary Engineering, Illinois Department of Public Health, and the Department of Civil Engineering, University of Illinois are the joint sponsors. Further information may be obtained from John H. Austin, Associate Professor of Sanitary Engineering, 203 Engineering Hall, University of Illinois, Urbana, Illinois 61801.



## SUMMER INSTITUTES AT NEW MEXICO STATE

New Mexico State University has announced two summer short courses on water resources for university and college teachers in science and engineering supported by the National Science Foundation. One course will be in "Weather Modification to Increase Water Resources" and the other will be in "Ground Water Hydrology." Stipends and travel allowances are available for participants. Applications must be mailed before March 1, 1967. Inquiries should be addressed to Dr. N. N. Gunaji, New Mexico State University, Box 449, Las Cruces, New Mexico.

## NEWS OF SANITARY ENGINEERING EDUCATORS

Professor R. S. Engelbrecht, University of Illinois, Professor R. E. Speece and C. V. Rama Rao received the Harrison Prescott Eddy Medal at the Water Pollution Control Federation Conference in Kansas City for their paper, "The Response of Activated Sludge to Nitrogen-Deficient Conditions." The paper appeared in the October 1965 issue of the WPCF Journal. Dr. Engelbrecht is Professor of Sanitary Engineering at the University of Illinois and a past-director of AAPSE. Dr. Speece is now Associate Professor of Civil Engineering at New Mexico State University. Mr. Rama Rao was a graduate research assistant at the University of Illinois and is now with McNamee Porter & Seeley, Consulting Engineers, in Ann Arbor, Michigan.

Professor D. J. O'Connor, Manhattan College, has been named to an advisory council of the Water Pollution Control Federation. The advisory council was appointed by WPCF after Frank DiLuzio, Assistant Secretary of the Interior challenged WPCF at its Conference in Kansas City to assume a role of leadership in the water pollution control efforts. The council will serve as consultants to DiLuzio. Other members of the council, in addition to Professor O'Connor, are A. D. Caster, E. C. Jansen, H. E. Schlenz, R. E. Lawrence, J. F. Byrd, R. E. Fuhrman, and C. B. Kaiser, Jr. Professor O'Connor is also a past-director of AAPSE and currently chairman of the Research Committee.

A new book by Professor W. W. Eckenfelder has just been published by McGraw-Hill. The book, Industrial Water Pollution Control, is part of the Sanitary Science and Water Resources Engineering series. Professor Eckenfelder is Professor of Civil Engineering at the University of Texas and is a director of AAPSE. The book grew out of the lectures presented by the author at the Summer Institute in Water Pollution Control at Manhattan College and is intended for first-year graduate civil engineers and practicing engineers.