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**JULY, 1978** 

# PRESIDENT'S CORNER

Take a **red** pen and reserve June 23 through June 27, 1980 on your calendar. Next, reach for your phone and call your spouse if married, or friend if not and suggest that these dates would be an excellent time for your 1980 vacation in Toronto, Canada. These are the dates and place for the tenth International Conference on Water Pollution Research.

My wife (Lorry) and I have just returned from the Ninth Biennial Conference in Stockholm which we both found to be a rewarding experience. The papers presented were generally well received and stimulated a healthy discussion by conference participants who came from a wide range of technical as well as cultural backgrounds. The conference format included: The participants having preread the papers, the authors only introducing rather than presenting their papers, an assigned discussor with a prepared text, open discussions from the floor and finally the opportunity for the authors to respond. The format created an atmosphere for discussion that one cannot duplicate by simply reading the proceedings. As a result of this atmosphere one develops a feeling for trends that are truly worldwide. For example Bertil Hawerman's opening speech for the conference called for a better working relationship between those concerned with water supply and water pollution. He stated, "In my opinion the two international organizations in the area IWSA and IAWPR, should strive towards a closer cooperation and coordination of their activities; the sooner the better."

Throughout the conference I was struck by the importance and direct relationships between the papers presented at the ninth International Conference on Water Pollution Research and the area of Water Supply. The feeling was reinforced by the discussions following the papers and perhaps was expressed most directly by Shuval (Israel) whem he stated that a closer relationship must be developed between those interested in waste water and drinking water treatment. Thus it would appear that while this concept is not new, worldwide sympathy mow exists toward this end, I expect to see real progress made soon.

The conference was not only rewarding technically but was a success for the families. The following are Lorry's impressions of some of the social aspects of the conference: "We attended the conference reception the first evening in one of the museums in Stockholm — met most of the rest of the U.S. contingent and also a number of people from other countries. One couple from Norway, were particularly interesting and suggested activities for us during our visit to Oslo. The next morning we attended the conference opening held in the Stockholm Konsert Hall and listened to the Stockholm Symphony Orchestra perform as well as the welcoming speeches — it was great."

... "A special performance was given for the conference participants at the Drottningholm Palace theatre. The theatre is about seven miles from Stockholm and we went by chartered boat. The palace itself is still used by the royal family in the summer. The theatre, which is a separate building from the palace, was built in the 1700's for special performances for the then King of Sweden. At the present time all performances use the same stage machinery and settings that were used at the time it was built. The seats were very narrow and hard but we wouldn't have missed it,"... "On the final night of the conference the banquet was held at the Stockholm City Hall in what they call the Golden Hall (there are 19 million pieces of pure gold mosaics in this room on the walls). This is the room where the banquets are held after the awarding of Nobel Prizes. We entered the courtyard, which is the ground floor of the building, surrounded by balconies that are divided into several rooms and galleries with gorgeous stained glass windows near the roof line. Sherry was served in the courtyard with an orchestra playing. All of a sudden the music stops - then the orchestra struck up a march, It was obvious that we were to go up the marble steps to the Golden Hall to the banquet (there were no announcements or directions but everyone seemed to know what should be done). Reindeer meat was the third course of the dinner - it was pretty good, didn't resemble anything comparable to U.S. After dinner the first piece the orchestra played was a waltz - it was really like the movies that we used to see of various settings in Europe. I could pack in an hour if plans were made to go again,"

In closing Lorry and I would simply say: Do plan to attend the tenth International Conference on Water Pollution Research with your family. It has been a decade since this conference was held in North America (San Francisco 1970) and it is a wonderful opportunity to share a rewarding experience.

Bruce Hanes Tufts University

# FRUH MEMORIAL FUND ESTABLISHED

Most AEEP Newsletter readers will already be aware of the tragic death of Gus Fruh in May of this year. Certainly his loss will be felt deeply by those who knew him personally and had the privilege of working with him in various capacities. In addition, his death represents a loss to the environmental engineering profession which he served with distinction during his brief 39 years.

As a continuing memorial to Gus, a fellowship fund has been established at the University of Texas at Austin. This fund will provide support for graduate students in Environmental Engineering. Contributions may be sent to the Engineering Foundation, College of Engineering, The University of Texas at Austin, Austin, Texas 78712. All contributions should be designated for the E. Gus Fruh Memorial.

#### AEEP ANNOUNCES NEW AWARDS

The Nalco Chemical Company and The Association of Environmental Engineers are pleased to announce the establishment of two awards for doctoral theses yielding significant chemical research in "Industrial Waste Treatment" and in "Water and Wastewater Treatment". Each award will be for a total of \$2,500. A faculty member and a doctoral student will be corecipients of each award, receiving \$1,250 each.

Applications for the "Water and Wastewater Treatment" award will be solicited in November 1978. It is anticipated that this award will be presented at the Annual Meeting of the American Water Works Association in 1979. More information concerning these awards will be published in the next issue of the AEEP Newsletter.

# WELCOME TO NEW AEEP MEMBERS

Dr. Herbert Allen Associate Professor Department of Environmental Engineering Illinois Institute of Technology Chicago, Illinois 60616

John Cirello, Assistant Professor Environmental Science, Rutgers University P.O. Box 231 New Brunswick, New Jersey 08903

Charles N. Haas Chemical and Environmental Engineering Rensselaer Polytechnic Institute Troy, New York 12181

Hhaj A. Khararjian Civil Engineering Memphis State University Memphis, Tennessee 38152

Dr. Richard G. Luthy Assistant Professor Department of Civil Engineering Carnegie-Mellon University Schenecy Park Pittsburgh, Pennsylvania 15213

Dr. Philip S. Pagoria
Assistant Professor
Department of Civil Engineering
Old Dominion University
Norfolk, Virginia 23508

George Tchobanoglous Civil Engineering University of California at Davis Davis, California 95616

Dr. Nguyen Cong Thanh, Chairman Environmental Engineering Division, AIT P.O. Box 2754 Bangkok, Thailand

Dr. Lawrence K. Wang Associate Professor Department of Mechanical Engineering Stevens Institute of Technology Hoboken, New Jersey 07030

#### UNDERGRADUATE REGISTER AVAILABLE

Copies of the *Register of Undergraduate Environmental Engineering Programs* are now available at a cost of \$6.00 each postpaid. **Or**der from:

Dr. D. B. Aulenbach
Department of Chemical and Environmental Engineering
Rensselaer Polytechnic Institute
Troy, New York 12181

# **CALL FOR PAPERS**

The American Water Works Association Research Foundation is organizing an International Water Reuse Symposium under the principal sponsorship of the Office of Water Research and Technology (U.S. Department of the Interior) and U.S. Army Medical BioEngineering Research and Development Laboratory. The Symposium will he held in Washington, DC March 25-29, 1979. With the theme of "Water Reuse — From Research to Application", it will be the first week-long effort devoted entirely to renovation and reuse of wastewaters. Subjects to be covered include pertinent case histories, new water recycling research and practical community applications. Selected papers will emphasize innovative approaches, new or unreported system design and performance data and future water reuse plans.

Technology transfer will be paramount from formal papers at plenary and concurrent sessions, sub-group workshops, and special poster presentations designed to optimize one-to-one communication.

The program is directed to individuals from water/waste-water utilities, consulting firms, federal and state research/regulatory agencies, research divisions of manufacturers, Universities and other water research organizations. Interested authors are invited to submit qualification information and a detailed 500 word abstract of their proposed papers by September 15, 1978 to:

Richard D. Heaton Conference Organizing Committee AWWA Research Foundation 6666 West Quincy Avenue Denver, Colorado 80235 U.S.A. (303) 794-7711.

National Conference on Environmental Engineering
San Francisco, California
July 9-11, 1979
Sponsored by the Division of Environmental Engineering
of the American Society of Civil Engineers
and Co-Sponsored by:
Department of Civil Engineering,
University of California, Berkeley
California State Department of Health Services
San Francisco Section of the

American Society of Civil Engineers

Papers are being requested which promote sound engineering thought and practice in environmental engineering: notably in the provision of safe and ample public water supplies; the proper disposal or recycle of wastewater and solid wastes; the adequate drainage of urban and rural areas for proper sanitation; the control of water, soil and air pollution; and the social and environmental impact of these solutions. Research papers in these areas are also desired and will be included in separate sessions of the conference. Persons interested should submit one to two pages summaries of their work by November 30, 1978 to:

Professor Robert E. Selleck Room 663, Davis Hall University of California Berkeley, CA 94720 The Environment Engineering Division is sponsoring six sessions at the ASCE Annual Convention in Atlanta in October, 1979. Subject areas include energy conservation in design, regional water development, environmental regulations, land treatment, sludge handling and disposal, and research. Prospective authors are encouraged to forward a 1-2 page abstract by Sept. 1, 1978, to either George D. Barnes, Williams-Russell & Assoc., Suite 1140, Atlanta Center, 250 Piedmont Ave., N.E., Atlanta, Georgia 30308, or Dennis W. Weeter, 73 Perkins Hall, The University of Tennessee, Knoxville, TN 37916.

The AWWA T&P Research Committee is seeking papers on research work in the water supply field for presentation at the 1979 Annual Conference to be held in San Francisco, California, June 24-29. As in 1978, two sessions have been requested by the Committee for presentation of research papers.

Papers will be chosen from abstracts received no later than Monday, December 4, 1978. All persons submitting an abstract will be notified by January 30, 1979, whether or not their paper was selected. Research papers dealing with water quality control, distribution, management and water resources are desired.

Eight copies of both an information sheet and a 300 to 1,000 word abstract of the research paper should be submitted to

E. F. Spitzer, Secretary American Water Works Association T&P Research Committee 6666 West Quincy Avenue Denver, Colorado 80235

Abstract information sheets can be obtained from the same source.

# INTERNATIONAL SYMPOSIUM ON BIOLOGICAL INDICATORS OF WATER QUALITY

The University of Newcastle Upon Tyne announces a symposium to be held September 12-15, 1978. A number of eminent research workers from Britain, the Continent and North America have been invited to review recent developments in the use of biological indicators to assess the quality of water.

The purpose of this symposium is to summarize the present state of knowledge on biological assessment so that more widespread use can be made of the biological populations in water. The quantitative and qualitative use of rooted plants, algae, vertebrates, invertebrates, protozoa and microorganisms in the examination of rivers, lakes, and reservoirs, abstracted waters, estuaries and coastal waters will be introduced by the speakers. Present British, Continental and North American systems and standards, and proposed new systems and standards will be fully discussed.

Additional information can be obtained from:

Mrs. Lilian M. Evison
Lecturer in Public Health Engineering
Department of Civil Engineering
The University
Newcastle Upon Tyne — NE 1 7 RU

#### PUBLICATION OF THESIS TITLES

As a service to the AEEP Membership, the Board of Directors have decided to publish the titles of theses completed each academic year by June 30. Only those lists submitted by the membership will be included in the listing. The next directory will appear early next fall for the 1977-78 work.

Time interval: July 1, 1977 to June 30, 1978

Classification of Titles:

Air Pollution

Agricultural Waste Management Instrumental Methods of Analysis

Industrial Waste Treatment

Land Treatment

Non Point Pollution

Rivers, Estuaries, and Lakes

Solid Wastes

Water and Wastewater Treatment

Water Management.

You may also use other classifications if there are a sufficient number of titles.

Format: "Title of Paper", Name of Author (Ph.D. or M.S.), X pp., Month Year, Name of University (Name of Faulty Advisor).

Comments: Since the availability of documents vary, persons interested in a specific publication will be asked to contact the Faulty Advisor directly.

Deadline: Submit by August 31, 1978 to:

J.F. Judkins, Jr. and J.M. Morgan

Co-Editors

**AEEP Newsletter** 

Department of Civil Engineering

Auburn University

Auburn, Alabama 36830

## TOWARD MORE MEMORABLE LECTURES

In spite of the availability of many alternate teaching techniques, most of us still rely on the lecture as our primary method of information transfer. One means of making our lectures more interesting (and thus more memorable) is to use stories, anecdotes and short case studies to illustrate various aspects of the lecture material. In an attempt to share the wealth, Aarne Vesilind is collecting various useful items from the profession and compiling these in an indexed volume.

Aarne would like to ask you to contribute your favorite and/or most useful items to this volume. Your contribution will of course be fully recognized, and you will receive a complimentary copy of the compendium when it is finished.

To make a contribution or for more information contact:

Dr. P. Aarne Vesilind
Department of Civil Engineering
Duke University
Durham, NC 27706
(919-684-2434)

# ACADEMIC MARKET PLACE

## DREXEL UNIVERSITY

The Environmental Studies Institute of Drexel University announces the availability of two faculty positions. Brief descriptions of the positions are presented below.

## 1. Air Pollution Control Engineer

This person will teach courses in community air pollution and the design of air pollution control equipment and will initiate research in the field of air pollution control. This individual will be associated with Professors Kreitzberg (Atmospheric Physics), Friend (Atmospheric Chemistry), Cernansky (Diesel exhaust) and others interested in air pollution.

The applicant has to have a Ph.D., but may be from Civil, Mechanical, Chemical or Environmental Engineering. It would also be desirable for the person to also be able to do research and teach in the Industrial Hygiene area.

## 2. Water Quality Engineer

This person may be expected to teach graduate and undergraduate courses dealing with water supply and waste water treatment and to initiate related research. The individual will also teach undergraduate courses in hydrology and hydraulics. The individual will be associated with Professors Speece and Parkin (Environmental Engineers), Pipes (Ecologist), Tallmadge (Chemical Engineer), Suffet (Environmental Chemist), Schoenberger (Environmental Engineer), Glaser (Environmental Modeling), Laessig (Environmental Systems) and others.

The applicant must have a Ph.D., but may be from Civil, Chemical or Environmental Engineering.

Both of these are regular faculty appointments. Rank and pay to start will depend on qualifications, Persons eligible for appointment as Assistant Professor are preferred. Interested persons should contact:

Dr. P. W. Purdom, Director Environmental Studies Institute Drexel University Philadelphia, Pennsylvania 19104

#### UNIVERSITY OF DELAWARE

The Department of Civil Engineering at the University of Delaware is seeking a faculty member with Ph.D. in the area of Environmental Engineering. Duties require instructing at undergraduate and graduate levels. The ability to direct graduate students and maintain a strong, independent research program is essential, as is competency in the biological aspects of environmental engineering. Rank and salary are commensurate with qualifications. Interested persons should send detailed resume and names of at least three references no later than September 1, 1978 to:

Chairperson
Department of Civil Engineering
University of Delaware
Newark, DE 19711

#### IOWA STATE UNIVERSITY

The Iowa State University Department of Civil Engineering is seeking a visiting Assistant, Associate or Full Professor for the 1978-79 academic year. The appointment will be for one-half time teaching and one-half time research. Recent Ph.D. recipients with interest in some fundamental aspect of biological waste treatment will be considered for a post-doctoral appointment. Interested persons should contact:

Dr. E. R. Baumann 496 Town Engineering Bldg Iowa State University Ames, Iowa 50011 (515-294-4975)

## OKLAHOMA STATE UNIVERSITY

The Oklahoma State University School of Civil Engineering has an opening for a Research Associate in Bioenvrionmental Engineering beginning in the fall semester 1978. The yearly salary range is \$15,00 to \$17,000. The position will involve teaching assignment in Bioenvironmental Engineering as well as responsibilities for conducting and directing research activities.

Applicants should have a Ph.D. (or have completed requirements for the degree) and should be appointable as associate or adjunct member of the graduate faculty. Preferably they should have authored or coauthored several research publications in referred journals. Applicants should be well trained in biochemistry and microbiology as well as environmental engineering and should have investigative experience in the biological aspects of water pollution control. Interested persons should contact:

Dr. A. F. Gaudy, Jr. Professor of Civil Engineering Oklahoma State University Stillwater, Oklahoma 74074 (405-624-5264)

#### NORTH DAKOTA STATE UNIVERSITY

The Civil Engineering Department of North Dakota State University has an opening for a tenure track faculty position. The professional rank and salary is open and depends on professional qualifications, education, and experience.

Major Area: Sanitary/Environmental Engineering

Professional experience and a Masters Degree in Sanitary Engineering are required. A Doctor's Degree in Sanitary Engineering is desirable. This faculty member will be responsible in the area of undergraduate and graduate courses in Sanitary Engineering, research activities, and to direct the research of graduate students.

The Civil Engineering Department has eight full time faculty members and serves the academic and research needs of undergraduate and graduate students. The Civil Engineering faculty are active in teaching, research, extension, and consulting. The College of Engineering and Architecture has seven departments with a combined enrollment

of about 1200 students.

North Dakota State University with an enrollment of about 7500 students in eight colleges is located in Fargo, North Dakota.

Applicants should send their resume and a transcript of their graduate study to:

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

#### STEVENS INSTITUTE OF TECHNOLOGY

A tenure track position is available in Civil Engineering at the rank of Assistant Professor starting in September 1978. Applicants with interest in the following areas will be considered.

Environmental Systems Geotechnical Structural

Applicants should possess undergraduate and masters degrees in Civil Engineering and a Ph.D. Prior teaching experience is desirable. Responsibilities will include undergraduate and graduate teaching, laboratory development and research in an area of specialization.

Interested persons should send their resume to Prof. J.J. Lawlor Chairman of the Search Committee Stevens Institute of Technology Castle Point Hoboken, NJ 07030

#### UTAH STATE UNIVERSITY

The Division of Environmental Engineering at Utah State University is seeking a visiting professor or a professor on sabbatical leave to assist with teaching and research during the coming academic year.

The level of appointment will depend on the individual's qualifications. Responsibilities will include half-time teaching of graduate and some upper division undergraduate environmental engineering courses and half-time research on funded projects. The nature of the courses and research can be arranged to be compatible with the individual's interests and background.

We would consider a post-doctoral student for the position.

Please encourage interested persons to send their reume to:

Dr. James H. Reynolds
Head, Division of Environmental Engineering
UMC 41
Utah State University
Logan, Utah 84322
(801-752-4100 ext. 7744)

# **OFFICERS**

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