



Association Of
Environmental
Engineering
Professors

NEWSLETTER

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SEPTEMBER 1989

PRESIDENT'S CORNER

My year as president is just about over. My heartfelt thanks go out to my fellow board members, the committee chairpersons, the committee members for their help and support, and of course, many thanks to the members at large for all their support. It has been a wonderful experience and I look forward to being of further service to AEEP.

In May, EPA sponsored a small workshop at Harper's Ferry, VA. The focus of the workshop was the question, "What new directions should EPA be pursuing?" Several AEEP members were there. We suggested that EPA needed to maintain both regulatory and research functions. To meet the increasing need for qualified professionals (a country-wide need), I suggested that EPA should reinstate the student fellowship program. It is my strong opinion that money invested in qualified students will reap greater rewards than money invested in one more treatment process. The idea was duly noted, and we moved on to other topics. A final position paper is expected by the end of the year.

On August 14 through 17, six members of AEEP, including Tom Keinath and me, attended the First Pan American Meeting of Sanitary and Environmental Engineering Professors, sponsored by PAHO, WHO, and AEEP. The purpose of the meeting was to explore ways in which effective collaboration can be estab-

lished with our counterparts in Latin America. As part of AEEP's outreach, the AEEP members who were there agreed that we should provide copies of the AEEP Register of Environmental Engineering Graduate Programs and the Membership Directory to each of the 40 schools with Sanitary and/or Environmental Engineering programs. If you are interested in participating in collaborative projects, or have some thoughts on the subject, please contact Tom Keinath or me. At the October WPCF meeting, the AEEP Board of Directors will be discussing how and what AEEP can do to forge closer relationships with both our Canadian and Latin American counterparts and associates. Finally, don't forget to mark Monday, October 16, 1989, on your calendar. The annual AEEP membership luncheon meeting will be held at the Hotel Nikko in San Francisco. This meeting will mark the completion of our 25th year as an organization. In addition to introducing the new Board members, our annual award presentations, and the publication of our history (prepared by Dave Hendricks), we will be honoring the founding members of AEEP. I invite and encourage each of you to attend the luncheon to share in the fellowship, to meet the new AEEP Board members, and especially to honor our founding members. I look forward to seeing you all at the luncheon.

George Tchobanoglous
President

AEEP NEWS AND ANNOUNCEMENTS

Annual AEEP Luncheon

As is our tradition, AEEP will host an annual membership luncheon on Monday, October 16, 1989, beginning at noon. The luncheon will be held in the Pink Pearl I & II rooms (3rd Floor) of the Hotel Nikko in San Francisco, which is located at 222 Mason Street directly opposite the Parc 55 Hotel which serves as

one of the two WPCF conference headquarters hotels. Reservations are required for this event since AEEP must guarantee the number of meals by 6 October 1989. Accordingly, please place your reservation **now** using the reservation form at the back of the *Newsletter*.

Tom Keinath
Vice-President

AEEP Meet and Greet Reception

The officers and directors of AEEP cordially invite all AEEP members, but especially the new and younger members to a "meet and greet" reception to be held on Monday, October 16, 1989, from 4:30 to 6:00 P.M. in the Dante Room of the Parc 55 Hotel which is located at 55 Cyril Magnin Street in San Francisco. This reception is in addition to the traditional luncheon which will be held earlier the same day. Although the primary objective of the reception is to enable the directors to become better acquainted with the new and younger members of AEEP, two important secondary objectives are to give these members the opportunity to influence and help shape the future goals and directions of the Association and to learn from the directors how they might participate in AEEP committees and become active in the organization. The officers and directors eagerly look forward to seeing many of you at the reception.

Tom Keinath
Vice-President

AEEP Workshop

An AEEP Workshop will be held on Tuesday, October 17, 1989, in conjunction with the Annual Conference of the Water Pollution Control Federation in San Francisco. Dr. C. H. Ward, of Rice University, will present the workshop on bioremediation. It will be held from 1:00-5:00 p.m. in Room E222 of the Moscone Convention Center. More information on registration will be sent to AEEP members. If you have any questions, please contact Bill Batchelor at 409-845-1304.

Senate Committee Testimony

The following statement was taken from the testimony given by Richard Luthy on behalf of the AEEP to the VA, HUD and Independent Agencies Appropriations Subcommittee of the Senate Committee on Appropriations.

The EPA must become more of a science agency in addition to a regulatory agency. The EPA ORD budget must be substantially increased to support longer-term research while also providing resources for the development of new scientists and engineers in order to expand the pool of technical professionals.

This is the second time AEEP has addressed the Senate about such matters. If you have not had an opportunity to read the entire document, you may obtain a copy from Dr. Luthy (412-268-2940).

Second Edition of Computer Manual — Call for Programs

AEEP is proceeding with the 2nd Edition of the computer Manual and is soliciting computer programs

from members for possible inclusion in the Manual. This version will attempt to include both IBM and Apple programs that can be used in teaching and research. Please contact J. B. Neethling (213-825-1774 or neethlin@ea.ucla.edu) if you would like to submit a program for the manual. If you have already indicated your intent to submit a program, you need not do so again.

AEEP Publications Available

The publications from AEEP are shown on the order form in this edition of the newsletter. This new order form reflects several changes in the publications that have occurred in the last few months.

The *Laboratory Manual for Unit Operations and Unit Processes* has been fully revised under the direction of Makram Suidan and is now available. This 1989 edition of the Manual has had a few new experiments added and a few deleted from the previous edition. In addition, all experiments were carefully reviewed (by several volunteers) prior to publication, so this new edition of the manual maintains the strengths of previous editions and includes several improvements.

The new edition of the *Register of Graduate Programs in Environmental Engineering* is also now available from the publications committee. This new 1989 edition has entries from 104 schools, with several pages for each program describing degree requirements, courses available, and faculty research interests. Compiled and edited by Bill Knocke and Gary Amy, this new publication should be invaluable in talking to students about attending graduate school. The price is slightly higher than the pre-publication price available when dues notices were mailed. As always, member prices for AEEP publications are set merely to cover costs.

Finally, the *Proceedings of the AEEP Conference on Fundamental Research Directions in Environmental Engineering* will soon be available and is now listed on the order form. This conference, held in Washington, D.C. in November, 1988, had sessions on physical, chemical, and biological aspects of air, land, water, and inter-media phenomena. All papers and formal discussions of the papers are included in the proceedings. For those who were not able to attend the conference, these proceedings are an excellent way of getting a glimpse of the directions of our field in the coming years. The views presented span several orders of magnitude in both time and space; many would form good discussion items among groups of graduate students and faculty.

Deadline for the December 1989 Newsletter

Please mail articles for the December issue of the AEEP Newsletter to the editor, G. D. Boardman, by November 1, 1989.

Welcome, New AEEP Members

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Drexel University
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GENERAL NEWS

AWWA Academic Achievement Awards

The American Water Works Association gives Academic Achievement Awards annually to the M.S. theses and Ph.D. dissertations judged to have the

most significant value to the water supply industry. The awards consist of checks for \$1000 and \$500 for the first and second students in each category, respectively, and plaques for the students and their major professors.

The winners of the 1989 Academic Achievement Awards were:

Doctoral Dissertations

FIRST PLACE: Coskun Yurteri

Drexel University, under the direction of Dr. **Mirat D. Gurol**. Title: "Removal of Organic Pollutants by Ozonation: Kinetics and Reactor Design".

SECOND PLACE: Domenic Grasso

The University of Michigan, under the direction of Dr. **Walter J. Weber, Jr.** Title: "Ozonation Dynamics in Water Treatment: Autocatalytic Decomposition, Mass Transfer, and Impact on Particle Stability".

Master's Theses

FIRST PLACE: Jan Elizabeth Dewaters

The University of North Carolina at Chapel Hill, under the direction of Dr. **Francis A. Digiano**. Title: "Biological Activity on Granular Activated Carbon in the Presence of Ozonated Naturally Occurring Humic Substances".

SECOND PLACE: Jeffrey Staudinger

Virginia Polytechnic Institute and State University, under the direction of Dr. **William R. Knocke** and Dr. **Clifford W. Randall**. Title: "Evaluation of Mass Transfer Correlations for Packed Column Air Stripping of Volatile Organic Contaminants From Water Supplies".

The deadline for entries for the next competition (for theses completed between 9/1/88 and 9/1/89) is October 1, 1989. Entry forms and additional information can be obtained by calling AWWA headquarters at 303-794-7711.

Call for Papers — AWWA Universities Forum

Abstracts are now being solicited for papers to be presented at the 19th Annual Universities Forum at the American Water Works Association Annual Conference to be held in Cincinnati, June 17-21, 1990. Student presenters/authors are being sought at all university levels. Papers must be based upon work completed by a student during the 1988-1989 or 1989-1990 academic year.

Papers should be related to public water supply including treatment, quality control, distribution systems, and resource development and management. Seven copies of an abstract not to exceed 5 total pages — no more than 2 pages of text, no more than 2 pages of figures and tables, and a completed abstract information sheet (available from AWWA) — should be submitted by December 15, 1989, to:

Universities Forum
AWWA
6666 W. Quincy Avenue
Denver, CO 80235

The 1989 Abel Wolman Doctoral Fellowship

The Abel Wolman Doctoral Fellowship was established to honor the late Professor Abel Wolman by encouraging promising students to pursue advanced training and research in the field of water supply and treatment. The fellowship provides up to \$15,000 per year in support for up to two years. The recipient of the 1989 fellowship was **Mark A. Waer**, a student at the **University of Illinois at Urbana-Champaign**. Mark began his career with the Philadelphia Water Department, and, after receiving his MS degree in engineering from Villanova University, he took a position as a distribution superintendent with the Commonwealth Water Company in Short Hills, New Jersey. Mark's research, under the direction of Professor **Vernon Snoeyink**, will focus on thermal regeneration of activated carbon.

The Larson Aquatic Research Support (LARS) Scholarships

The LARS scholarships program was established in 1988 to honor the memory of Dr. Thurston E. (Lars) Larson, a dedicated water chemist and researcher who, in his 44-year career with the Illinois State Water Survey, made numerous scientific contributions in areas such as corrosion control, treatment and distribution of domestic and industrial water supplies, aquatic chemistry, analytical chemistry, and environmental chemistry. The scholarships, which provide \$5,000 in support for PhD students and \$3,000 for MS students, are awarded based on the applicant's academic excellence and potential to provide leadership in one of the fields served by Dr. Larson. The recipients of the inaugural (1989) awards were **Lisa M. Alvarez**, a PhD student at Stanford University, and **Susan M. Teefy**, an MS student at the University of North Carolina. Lisa's research, under the direction of Professor Perry L. McCarty, is designed to examine the interaction between sorption and biodegradation of contaminants in aquifer environments. Susan is working with Professor Philip C. Singer to explore alternatives to chlorination for the Washington Suburban Sanitary Commission.

Environmental Engineering Selection Guide

The 1989 edition of the *Environmental Engineering Selection Guide* is now available from the American Academy of Environmental Engineers. Upon request, the *Guide* is provided **free of charge** to those that employ environmental engineers.

The *Guide* provides a resource for those seeking to locate environmental engineering experts for consulting assignments. It also lists the accredited environmental engineering programs at U.S. universities, all those professors who are certified environmental engineering specialists, and those certified environ-

mental engineering specialists employed in the manufacture and sales of pollution control equipment.

To obtain a **free** copy of the 1989 *Environmental Engineering Selection Guide*, write on your letterhead to the American Academy of Environmental Engineers, 132 Holiday Court, Suite 206, Annapolis, Maryland 21401.

Who's Who in Environmental Engineering

The 1989 edition of *Who's Who in Environmental Engineering*, published by the American Academy of Environmental Engineers, is now available.

The book provides a listing of environmental engineers in all occupational groups, e.g., consulting, government, education, etc., who have special knowledge in one or more of the following areas:

- Air Pollution Control
- General (Public Health) Environmental Engineering
- Hazardous Waste Management
- Industrial Hygiene
- Radiation Protection
- Solid Waste Management
- Water Supply and Wastewater Engineering

Copies of this hardcover edition of *Who's Who in Environmental Engineering* can be purchased for \$50.00, postage paid, from the American Academy

of Environmental Engineers, 132 Holiday Court, Suite 206, Annapolis, Maryland 21401.

Eklutna Water Project Wins Award of Merit in ASCE's Outstanding Civil Engineering Achievement Award

The Eklutna Water Project, 30 miles north of Anchorage, Alaska, has been named a winner of an Award of Merit in the American Society of Civil Engineers' (ASCE) 1989 Outstanding Civil Engineering Achievement Award competition.

The Eklutna Water Project includes the world's largest glacial water treatment plant and system, designed to supply a safe, dependable, long-term source of drinking water to the people of Anchorage. Over 1,400 sections of pipe transport large quantities of water originating from a mountain lake more than 30 miles north of Anchorage. Just before entering the treatment plant, the water passes through an energy recovery station.

The Eklutna project consists of an intake structure, tunnel, raw water transmission facilities, treated water transmission pipeline, and downstream energy recovery station.

The challenges faced by the project team included: removing turbidity caused by rock scour from glacial water; sludge handling and disposal using new and enhanced technology; crossing active earthquake faults with a major water conduit; exposure to active volcanoes; construction across permafrost, sensitive wetlands, and across migratory fish streams; cold weather construction; and traversing highly variable subsurface conditions with a major tunnel. Because of the high seismic potential of the area, flow-activated emergency control valves were installed at both ends of the tunnel.

CONFERENCES AND EDUCATIONAL PROGRAMS

IAWPRC Call for Papers and Participants

A specialized Workshop on Advances in Anaerobic Treatment for Industrial and Municipal Wastewaters sponsored by the IAWPRC in cooperation with the IAWPRC Specialist Group on Anaerobic Digestion will be held in early October 1990 in Spain. The ultimate purpose of this meeting is to develop and publish a consensus paper on the present state-of-the-art of anaerobic treatment technology. In particular the consensus paper will examine the similarities, differences, and appropriate applications of the various anaerobic treatment systems in terms of costs, efficiencies, loading potentials, stability, biomass management, and operation and control.

Active researchers are encouraged to participate in one of the four areas (kinetics, reactor systems and start-up, system operation and design fundamentals, and modelling) and to prepare and present a paper, to serve as a referee, or to help formulate the consensus paper. Limited funding will be made available to selected participants to partially cover expenses. Once the program is developed with participant assignment, a general announcement will be prepared.

For additional information contact:

Dr. Michael S. Switzenbaum
Dept. of Civil Engineering
University of Massachusetts
Amherst, MA 01003, USA.

SETAC '89

The Tenth Annual Meeting of the Society of Environmental Toxicology and Chemistry (SETAC) will be held on October 28th-November 2nd, 1989, at the Royal York Hotel, Toronto, Ontario, Canada. The meeting theme is "Transboundary Pollution". Platform and display/poster sessions will emphasize this theme.

Short courses will be held on Sunday, followed by a plenary session, an awards ceremony, and a reception Sunday evening. Monday morning will include a plenary session and keynote addresses. Tuesday to Thursday will include concurrent technical sessions with integrative workshops.

There will be both display/poster and platform presentations at the 1989 Annual Meeting. Display sessions will be held concurrently with platform sessions and exhibits, but the topics will be alternated to prevent subject conflicts. Hour-long staggered breaks for poster viewing have been scheduled morning and afternoon to avoid a rush at the posters and exhibits.

Major session topics include: transboundary pollution, chemicals in extreme environments, issues related to sediments, processes and bioaccumulation. Sessions will also focus on methods and techniques in ecotoxicology, waste treatment, environmental chemistry and groundwater.

For spouses and guests there will be tours of Toronto and other nearby points of interest. Also available for a small extra cost is an escorted bus tour to Niagara Falls.

For more information contact:

Keith R. Solomon
Local Organizing Committee
Canadian Centre for Toxicology
645 Gordon Street, Guelph, Ontario
N1G 1Y3, Canada.
☎ (519) 837-3320

IWEM 90 — Call for Papers

A call for papers has been issued by the Institution of Water and Environmental Management for IWEM '90 — a conference on "Design and Construction of Works for Water and Environmental Management".

Offers of papers are invited on all aspects of the design process from feasibility studies through preliminary to detailed design. Papers on the advantages of computer-aided design and project management techniques will be particularly welcome.

Papers on construction should deal with current schemes describing the significance of construction methods and materials.

The subject areas for papers on both design and construction should be water supply and treatment, sewerage and sewage treatment, flood alleviation

and waste disposal — covering transfer stations, landfills and incineration. Offers of papers on other related subjects will also be considered.

A short synopsis (about 250-300 words) of proposed papers should be sent to IWEM by 31 October 1989. Final manuscripts will be required by 31 May 1990.

IWEM 90 will be held in Glasgow from 4-6 September 1990 and it is a condition of acceptance of offers that authors will attend in person to present their papers.

Synopses should be sent to:

Mrs. L. Gittins
IWEM
15 John Street
London WC1N 2EB

IWEM Engineering for Health

The centenary of the death of Sir Edwin Chadwick, the public health pioneer, will be marked by a major symposium in Manchester on 27-28 March 1990.

"Engineering for Health" is designed to strengthen the links between the engineering, medical and scientific professions, with particular reference to environmental health.

Papers to be presented at the symposium will deal with water supply and sanitation, waste disposal, building services and occupational health. Speakers will be drawn from the engineering, medical and scientific community, to provide an inter-disciplinary discussion on the pressures on the environment, control measures and the scope for improvements.

A key note address reviewing the influence of Sir Edwin Chadwick on the development of sanitary science will be given by M. A. Acheson, formerly Manager of Community Water Supply and Sanitation, World Health Organisation.

The symposium will be followed on 29 March by a one day workshop for educators in hygiene in relation to water supply and sanitation schemes.

Further information is available from Mrs. Lavinia Gittins, IWEM, 15 John Street, London WC1N 2EB; ☎ 01-831-3110.

CONSERV 90 — Water Supply Solutions for the 1990s

While for many parts of the nation the summer of 1989 was a major relief from the 1988 drought, concern over increasingly warmer weather cycles should not be dispelled. The nation must be better prepared to deal with its water supply problems in the next decade than it has been in the last decade.

To insure that a high level of preparedness is indeed achieved, 29 national associations and organizations have joined with the CONSERV 90 sponsors to

promote this national water management conference and exposition to be held August 12-15, 1990, in Phoenix, Arizona.

CONSERV 90 is a joint venture of the American Society of Civil Engineers, American Water Resources Association, American Water Works Association, and the National Water Well Association. These associations have a conference objective of reaching ev-

erybody in this country who makes decisions that affect how water is supplied, distributed or consumed.

For more information contact:

CONSERV 90 Managing Partners
6375 Riverside Drive
Dublin, OH 43017
☎ 614-761-1711

EMPLOYMENT OPPORTUNITIES

University of California, Riverside

The newly formed college of Engineering at the University of California, Riverside expects to make a faculty tenure/tenure-track appointment in the area of Environmental Engineering on or after July 1, 1989. While the appointment level is open, preference will be given to exceptional, qualified individuals having an established record in research. Applicants in all areas of environmental engineering science are welcome. Research within the fields of aquatic chemistry, water quality, groundwater pollution, hazardous wastes, risk assessment, and air pollution control are of particular interest. The individual appointed will be expected to play a strong role in the development of both Environmental Engineering and the College of Engineering. Please send a resume and names of at least three individuals willing to write letters of reference to:

Chair, Search Committee
Environmental Engineering
College of Engineering
University of California
Riverside, California 92521

The University of California, Riverside is an Equal Opportunity, Affirmative Action Employer.

Montana State University

Montana State University Department of Civil and Agricultural Engineering invites applications for a tenure track position in environmental engineering at the assistant professor level. The successful candidate will teach undergraduate and graduate courses in environmental engineering and will develop a research program that complements the academic and research programs of the department. At the graduate level, teaching emphasis will be on fundamental processes in environmental engineering and on water and wastewater process design. Candidates should have a strong academic background in these areas. Research interests should be in the area of chemical and/or biological processes and their applications to the treatment of wastewater and hazardous and toxic substances. The successful candidate must be able to relate to

undergraduate and graduate students, and to work with a multidisciplinary research team.

Minimum qualifications include a Ph.D. in environmental engineering or a closely related field. An undergraduate degree from an accredited program in civil or chemical engineering is highly desirable, as is experience teaching, research and/or design. A statement of interest with a current resume and at least three letters of recommendations should be sent to: Dr. Howard S. Peavy, Department of Civil and Agricultural Engineering, Montana State University, Bozeman, MT 59717. Review of applications will begin May 1, 1989, and will continue until the position is filled.

Montana State University is an equal opportunity, affirmative action institution; applications from minorities and women are encouraged.

University of Ottawa

The Department of Civil Engineering of the University of Ottawa is seeking candidates to fill faculty positions at the Assistant Professor level. The positions are currently for a period of one year, with a strong possibility of extending towards tenure track appointments.

A Ph.D. and a strong desire to carry out research in the field of Environmental Engineering is a must. The successful candidates are expected to supervise graduate students and conduct research in one or more of: 1) Water Quality or Waste Water Treatment, 2) Contaminant Transport, 3) Air Pollution, 4) Urban Hydrology, 5) Other fields of Environmental Engineering. Teaching duties will include both undergraduate and graduate programmes. A working knowledge in both English and French is an asset.

Employment equity is a policy of the University of Ottawa. In accordance with Canadian immigration regulations, however, Canadian citizens and permanent residents will be given higher priority.

Interested applicants are asked to direct their letter of application, curriculum vitae and names of three referees to:

Dr. H. Tanaka
Professor and Chairman
Department of Civil Engineering
University of Ottawa
770 King Edward Avenue
Ottawa, Ontario K1N 6N5
☎ (613) 564-5780
FAX (613) 564-7681

Syracuse University

The faculty of the Department of Civil and Environmental Engineering at Syracuse University invites applications for a newly authorized tenure-track position in Environmental Engineering. The position will involve undergraduate and graduate teaching, as well as the development of a research program. A Ph.D. in engineering is preferred and experience in environmental engineering and/or the environmental sciences is desired. The candidates should have a strong background and interest in water quality modeling, water chemistry and hydrology. The position provides an opportunity to join an established program with a large graduate enrollment.

The Appointment will be made at the rank of Assistant Professor. Applications and a list of four references should be sent to:

Dr. Samuel P. Clemence
Chairman, Dept. of Civil and Env. Eng.
220 Hinds Hall
Syracuse University
Syracuse, New York 13244-1190

Screening of applicants may begin as early as August 1, 1989. *Syracuse University is an equal opportunity, affirmative action employer.*

Virginia Polytechnic Institute and State University

C. E. Via Department of Civil Engineering — A search is underway for the position of Department Head. Applicants should have experience in teaching and research and a record of demonstrated scholarship. One of ten departments in a College of Engineering ranked nationally for both its graduate and undergraduate programs, Civil Engineering has stable enrollments of about 400 and 200 at the undergraduate and graduate levels. There are 36 faculty in six divisions: construction management, environmental, geotechnical, hydrosystems, structures, and transportation, with geodetics taught at the Northern Virginia Graduate Center. Faculty have a record for excellent teaching, and are active in research with annual research expenditures over \$2.5 million. The department received a \$5 million endowment in 1987, and earnings provide independent resources for support of fellowships, student activities and professorships. Liberal overhead return policy provides the department with supplementary income. Excellent experimental and computer equipment base in-place for growth of department. The University, the largest state institution in Virginia, is located in Blacksburg in the heart of the Blue Ridge Mountains, providing a scenic setting. The Department Head position offers a significant opportunity to a person with a dedication to the profession of civil engineering, and ideas for the future.

Applications, including a current resume and a list of three names to contact for reference, should be sent to the address given below, and should be received by November 1, 1989. *Virginia Tech is an Equal Opportunity/Affirmative Action Employer.*

Professor F. William Stephenson
Associate Dean for Research
College of Engineering
Virginia Polytechnic Institute and State University
Blacksburg, Virginia 24061

ASSOCIATION OF ENVIRONMENTAL ENGINEERING PROFESSORS

TWENTY-SIXTH ANNIVERSARY LUNCHEON & MEETING

16 OCTOBER 1989
12:00 NOON
HOTEL NIKKO, SAN FRANCISCO
PINK PEARL I & II (3RD FLOOR)

COST: \$15.00

PROGRAM

Reports by AEEP Officers

Reservations are required. This is a sit down function. The hotel requires that the number of meals to be served be guaranteed by **6 October 1989**. Reserve your place today. Complete and return the attached reservation form to (or call): Dr. Thomas M. Keinath, Environmental Systems Engineering, Clemson University, Clemson, SC 29634-0919; ☎ 803/656-5572; Fax 803/656-2698.

RESERVATION FORM

AEEP LUNCHEON & MEMBERSHIP MEETING
16 OCTOBER 1989, SAN FRANCISCO

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Thomas M. Keinath
Environmental Systems Engineering
Clemson University
Clemson, SC 29634-0919

ASSOCIATION OF ENVIRONMENTAL ENGINEERING PROFESSORS
 Attn: Dr. Desmond F. Lawler
 Department of Civil Engineering, ECJ 8.6
 The University of Texas at Austin
 Austin, Texas 78712

Item #	Title	Member Price	Non-Mem. Price	Quantity	Amount
1	Environmental Engineering Unit Operations and Unit Processes Lab. Man. (Ed.: Suidan)	\$10.00	\$20.00		
2	Aquatic Microbiology Laboratory Manual (Cooper, <i>et al.</i>)	\$ 7.00	\$ 7.00		
3	Proceedings, Fifth Conference on Environmental Engineering Education (July, 1986, Houghton, MI)	Free	\$ 3.00		
4	Fundamental Research Directions for Environmental Engineering (Proceedings of the Nov., 1988 AEEP/NSF Conference)	\$ 8.00	\$16.00		
5	Register of Environmental Engineering Graduate Programs (1989 Edition)	\$25.00	\$50.00		
6	So You Want to Be an Environmental Engineer?	\$.50	\$.50		
7	AEEP Computer Manual (Ed.: Crittenden)	\$20.00	\$40.00		
8	AEEP Diskette (Set of 5 Discs)	\$10.00	\$20.00		

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Association Of Environmental Engineering Professors

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Blacksburg, Virginia 24061



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1990-91 Fulbright Awards in Water Technologies

Australia

Lecturing/Research Awards

International Trade Issues. Lecture or conduct research on 1 of the following topics: development of export-oriented enterprises; protectionism and free-market approaches; competition in overseas markets for commodities and services; international effects of the deregulation of banking and other financial services; territorial waters and exploration/exploitation of resources. (Award code #0040)

For information on this award, call Marguerite Hulbert, Program Officer, 202/686-4025.

Costa Rica

Lecturing Awards

Soil Conservation. Teach G courses in soil conservation and assist with curriculum development. Ph.D. and 2 years of teaching/research experience in agricultural and irrigation engineering required. Basic Spanish required. School of Agricultural Engineering, University of Costa Rica, San Jose. Ten months, beginning 3/90. (Award code #0189)

For information on this award, call Leslie C. Hunter, Program Officer, 202/686-6238.

Cyprus

Research Awards

Wastewater Management. Conduct research and consult on use of wastewater for irrigation in the Greek community and in the Turkish community. Advise research institutes and professional organizations on health risks to people and animals from biological agents when re-using treated municipal was-

tewater; evaluate existing laboratories and facilities; develop a plan for future facilities, equipment, and training. Details to be arranged with grantee. Agricultural Research Institute, Nicosia. Six months, beginning 6/90. A later starting date, up to 1/91, is possible. (Award code #0202)

For information on this award, call Frederik Ohles, Program Officer, 202/686-6245.

Jordan

Lecturing Awards

Hydrology and Irrigation. Specialist in surface of ground water hydrology to teach 1 UG course in engineering hydrology and 1 or more G courses in advanced hydrology (surface or ground water) and water resources management. Consult on program development and research topics. University of Jordan, Amman. Ten months, beginning 9/90. (Award code #0463)

For information on this award, call Gary Garrison, Program Officer, 202/686-4019.

New Zealand

Lecturing Awards

Architectural Engineering for Tourism: Serial Grant. Assist in establishing a new program in the design and development of attractive tourist facilities. Develop course objectives and curriculum suitable for students in business studies, agricultural and horticultural studies. Cover basic aspects of building design, landscaping, accommodation design, water, power, security, communications, transportation, drainage, waste disposal. Focus on expectations of

overseas tourists. Initial visit 10/90 to 3/91; second visit 3/92 to 6/92; third visit 9/93 to 1/94. Massey University, Palmerston North. Six months, beginning 10/90. (Award code #0568)

For information on this award, call Marguerite Hulbert, Program Officer, 202/686-4025.

Pakistan

Lecturing/Research Awards

Pure and Applied Sciences. One award for lecturing at government Centres of Excellence in any of the following fields: analytical chemistry (University of Sind); geology and physical chemistry (University of Peshawar); marine biology (Karachi University); mineralogy (Baluchistan University); solid-state physics (University of the Punjab, Lahore); and water resources engineering (University of Engineering and Technology, Lahore). In addition to lecturing, research possibilities exist. Nine months, beginning 9/90. (Award code #0611)

For information on this award call, Renee Taft, Program Officer, 202/686-4010.

Poland

Lecturing Awards

Environmental Sciences. Teach courses in any specialization of the environmental sciences. Special interest has been expressed in atmospheric pollution, water treatment technology, resource management, and environmental engineering. Marie Curie Sklodowska University, Lublin. Ten months, beginning 9/90, or 5 months, beginning 9/90 or 2/91. (Award code #0651)

Environmental Sciences. Teach courses in any of the following fields: water supply systems and wastewater treatment, technology of wastewater treatment and treatment of industrial waste, or techniques of air pollution control and improvement of urban air quality. Technical University of Krakow. Ten months, beginning 9/90, or 5 months, beginning 9/90 or 2/91. (Award code #0653)

For information on these awards call, Muriel Joffe, Program Officer, 202/686-6248.

Qatar

Research Awards

Marine Biology/Oceanography. Specialist in algae flora to participate in an ongoing research project in collecting and identifying algae in gulf waters. Work includes performing chemical extraction/evaluation of algae and identifying economic value of nutrients. Placement at Qatar University and Research Institute, Scientific and Applied Research Center. Students are advanced undergraduates. Grantee may be called upon to deliver lectures and to assist in program development and staff training. Ph.D. and minimum 3 years of teaching experience required. Colloquial Arabic useful, but not required. Nine months preferred, but grants of 3-6 months will also be considered, beginning 9/90. (Award code #0689)

Lecturing Awards

Civil Engineering. Teach UG courses in civil engineering. Specializations of interest include mechanics, structures, foundations, water resources, environmental and transportation engineering. Grantee may also contribute to applied research and assist in development of laboratory facilities. There may be some opportunity for research at the Scientific and Applied Research Center institute attached to the university. Research may relate to remote-sensing project, installation of digital-data-processing facility for study of Landsat and other images. Instruction in College of Engineering is in English. Ph.D. and minimum 3 years of teaching experience required. Qatar University, Doha. Nine months preferred, but grants of 3-6 months will also be considered, beginning 9/90. (Award code #0691)

For more information on these awards call, Christiane Neuman, Program Officer 202/686-4012.

Sweden

Research Awards

Water and Environmental Studies. Participate in research in the following areas: environmental history, especially after World War II; risk assessment and decision making for environmental pollution control and conflict resolution; water resource management for concurrent conservation and production; and challenges for the 21st century. Department of Water and Environmental Studies, University of Linköping. Four months, beginning 9/90. (Award code #0735)

For more information on this award call, Jean McPeck, Program Officer, 202/686-6241.

Tanzania

Lecturing Awards

Geography. Teach UG courses in population and settlements, African geography, demography; or hydro-meteorology and water resources development. Assist with development of master's program. Opportunity for research. Candidates should have specialization in either economic geography or physical geography, as well as 5-10 years of university teaching experience. Department of Geography, University of Dar es Salaam. Ten months, beginning 7/89. (Award code #0771)

For more information on this award call, Ellen N. Kornegay, Program Officer, 202/686-4028.

Thailand

Lecturing/Research Awards

Adaptation to Change. Consult with government and academic institutions on issues and problems related to change, with respect to either cultural values or the quality of the environment. Assist with design of research projects. Engage in collaborative research. Cultural change issues of interest include cultural resiliency and preservation of cultural heritage, changing social roles, the changing role of religion in inculcating values, etc. Environmental issues of interest include raising environmental aware-

ness; effects of rural-urban migration; balancing development and preservation of the natural environment; destruction of the forests; and air, noise, and water pollution. Nonacademic professionals should have at least 5 years of experience beyond the terminal degree. Affiliation to be arranged. Four to 9 months, beginning 6/90 or later. (Award code #0778)

For more information on this award call, David Adams, Program Officer, 202/686-4025.

United Arab Emirates

Research Awards

Desert Agriculture. Conduct research and give some lectures to senior students and teaching assistants in the following specializations of interest: plant tissue culture; arid zone agriculture; use of saline water in agriculture, particularly horticulture; date palm plantation. Also, consult with faculty colleagues and assist in setting up research centers. Ph.D. with experience in research, especially in setting up research centers, requested. Junior or mid-career candidates preferred. Basic Arabic language skills preferred, but not required. Faculty of Agriculture and Desert and Marine Environment Research Center, United Arab Emirates University, Al-Ain. Nine or 4 months, beginning 9/90. (Award code #0815)

For more information on this award call, Christiane Neuman, Program Officer 202/686-4012.

Zambia

Lecturing Awards

Production Engineering. Teach courses in irrigation (water engineering) or machine tool engineering. Design courses to be taught, select texts to be used, assist with curriculum development, and assist in general with building the teaching, reference, and research resources of the School of Technology. Candidates with Ph.D., minimum rank of assistant professor, and minimum 3 years of teaching experience are preferred. (Priority field.) Copperbelt University, Kitwe. Ten months, beginning 10/90. (Award code #0872)

For more information on this award call Linda Rhoad, Program Officer, 202/686-6230.