



Association Of  
Environmental  
Engineering  
Professors

# NEWSLETTER

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SEPTEMBER 1990

## PRESIDENT'S CORNER

My year as president is about to conclude. It has been a most pleasant and memorable experience. Thank you for giving me the opportunity to serve you in this manner.

Let me extend my gratitude to my fellow Board members, the committee chairpersons, and all the committee members for their help and support. I also wish to thank all the members at large for their dedicated service to our profession. AEEP is a strong and viable organization principally because of its dedicated members.

Each year certain of AEEP's members serve the organization in an exemplary manner. This year, Dave Hendrick's (Colorado State University) service in preparing a manuscript detailing AEEP's 25 year history is especially noteworthy. Those of you who have received and read a copy of the history know of what I speak. Dave, I feel confident that all AEEP members join me in thanking you for your outstanding efforts.

Another AEEP member whose dedicated service is to be recognized is Greg Boardman (VPI) who has served as editor of the AEEP Newsletter for a number of years, and is retiring with this issue. Greg has performed superbly in this capacity. Thanks for your efforts Greg. Anyone interested in replacing Greg as newsletter editor should contact either me or Bill Knocke (VPI).

At its May meeting, the AEEP Board reached decisions on the next education conference. The conference scheduled for the Summer of 1991 will focus on "Environmental Engineering for the Year 2000". Ken Williamson of Oregon State University will serve as the conference organizer and host. Please make plans now to attend this conference.

Ricardo Jacquez, AEEP's liaison on Latin American initiatives, and I will be attending the second annual Pan American Meeting of Sanitary and Environmental Engineering Professors to be held in San Juan, Puerto Rico on 7-8 September. This meeting is

sponsored by PAHO, WHO, AIDES and AEEP for the purpose of exploring ways in which effective collaboration can be established with our counterparts in Latin America. I'll inform you of the outcome of that meeting.

Early in June I wrote the directors of all the environmental engineering programs across the U.S. regarding the recommended practice for making graduate assistantship offers and the timing of acceptances. Because the response to my memo indicated that the recommended practice is not broadly known and since this is an important issue in the view of the AEEP Board, I will share this information with all AEEP members. For several decades the Council of Graduate Schools has encouraged all graduate programs at its member universities--which includes virtually all AEEP member universities--to give prospective students until April 15 to make decisions regarding acceptance of an offer. Also, students having accepted an offer and wishing to accept another after April 15 are expected to obtain a written release from the first institution before accepting an alternate offer. Similarly, institutions making offers after April 15 are expected to require the prospective student to present a written release from any previously accepted offer. The Council of Graduate Schools formally adopted this long-standing recommended practice in a resolution more than two years ago. The AEEP Board considered this resolution at its May meeting, and unanimously endorsed it. Out of a sense of fairness to prospective students, consequently, the Board encourages all AEEP member programs to support the spirit and intent of this resolution giving students an opportunity to thoroughly investigate all graduate school opportunities before being compelled to make a decision on an assistantship offer.

The U.S. Congress presently is considering a bill entitled the *National Environmental Education Act* (S.1076 & H.R.3684). The primary objective of this bill is to provide for a program to train educational professionals in the development and delivery of envi-

ronmental education and training programs and studies. The ultimate goal is to bring the citizenry of the United States to a higher level of environmental consciousness and sensitivity. While it is extremely important that this goal is achieved, the Act falls short in the sense that it fails to provide for the education of the environmental professionals required to provide scientific and technical solutions to environmental problems that the nation's populace will increasingly demand on account of an ever increasing level of environmental sensitivity. In my view it is important that both objectives are achieved through the Act. Failure to do so will result in a high level of environmental frustration and tension caused by a populace demanding a clean environment and a professional human resource infrastructure unable to respond. I believe that EPA should be actively involved in encouraging the education of environmental professionals, perhaps by reinstating the fellowships and training grants program that was active during the 60's and 70's.

Should you agree with me, I encourage you to write your congressman to this effect.

AEEP's annual luncheon and meeting will be held on Monday, October 8 in conjunction with the 1990 Conference of the Water Pollution Control Federation. The luncheon will begin at 12 noon in the Renaissance Ballroom, West Salon B of the Ramada Renaissance Hotel. All AEEP members are cordially invited to attend this luncheon. Please make your reservations with Bruce Rittmann of the University of Illinois at your earliest opportunity.

AEEP will also host a Meet and Greet Reception from 5:00 to 7:00 PM later the same day. This reception also will be held in the Renaissance Ballroom, West Salon B. The entire AEEP Board joins me in looking forward to seeing many of you at both functions.

Tom Keinath  
President

## AEEP NEWS AND ANNOUNCEMENTS

### AWWA Academic Achievement

The American Water Works Association gives academic Achievement Awards annually to the MS theses and PhD 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 1990 Academic Achievement Awards were:

#### DOCTORAL DISSERTATIONS:

**FIRST PLACE: Jacques Manem** - U. of Illinois, under the direction of **Dr. Bruce E. Rittmann**; Title: "Interactions Between Heterotrophic and Autotrophic Bacteria in Fixed-Film Biological Processes Used in Drinking Water Treatment".

**SECOND PLACE: James P. Malley, Jr.** - U. of Massachusetts, under the direction of **Dr. James K. Edzwald**; Title: "A Fundamental Study of Dissolved Air Flotation for the Treatment of Low Turbidity Waters Containing Natural Organic Matter".

#### MASTER'S THESES

**FIRST PLACE: James M. Fenstermacher, Jr.** - U. of New Hampshire, under the direction of **Dr. M. Robin Collins**; Title: "Modifications to Slow-Rate Filtration to Improve Removal of Trihalomethane Precursors".

**SECOND PLACE: Xiaoxin Men** - Pennsylvania State U., under the direction of **Dr. Brian A. Dempsey**; Title: "Production, Characterization, and Application of Polyaluminum Sulfate (PAS)".

The deadline for entries for the next competition (for theses completed between 9/1/89 and 9/1/90) is October 1, 1990. Entry forms and additional information can be obtained by calling AWWA headquarters at 303-794-7711.

### AEEP Annual Luncheon, Meeting and Reception

AEEP's Annual Luncheon and Meeting will be held on Monday, October 8 in conjunction with the 1990 Conference of the Water Pollution Control Federation. The Luncheon will occur from 12 noon until approximately 1:30 PM in the Renaissance Ballroom, West Salon B of the Ramada Renaissance Hotel. The Ramada Renaissance Hotel is located directly across 9th Street from the Washington, D.C. Convention Center.

You must make a reservation for the Luncheon. To do so, complete the following form and return it to:

Professor Bruce E. Rittmann  
3224 Newmark Civil Engineering Lab.  
U. of Illinois at Urbana-Champaign  
205 North Mathews Avenue  
Urbana, IL 61801.

#### RESERVATION FORM AEEP ANNUAL BANQUET AND MEETING

Name \_\_\_\_\_

Address \_\_\_\_\_

Your Luncheon reservation must be received by September 21, 1990. The cost of the Luncheon is \$20. You are encouraged to pay by check when you return your reservation form. Payments made in advance greatly reduce the delays and confusion at the door. Checks should be made payable to AEEP.

AEEP also will sponsor a Meet and Greet Reception at 5:00-7:00 PM on Monday, October 8. The location is the same as for the Luncheon--Renaissance Ball-

room, West Salon B. No reservations are required for the Meet and Greet.

## Deadline for December 1990 Newsletter

Please submit articles for the December issue of the AEEP Newsletter to the Editor, G. D. Boardman, by November 1, 1990.

## GENERAL NEWS

### Call For Papers — AWWA Universities Forum

Abstracts are now being solicited for papers to be presented at the 20th Annual Universities Forum at the American Water Works Association Annual Conference to be held in Philadelphia, June 23-27, 1991. Student presenters/authors are being sought at all university levels. Papers must be based upon work completed by a student during the 1989-90 or 1990-91 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, 1990 to:

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

### The 1990 Abel Wolman Doctoral Fellowship

The recipient of AWWA's 1990 Abel Wolman Doctoral Fellowship was **Margaret Carter**, a doctoral student at the University of Michigan. Her research, under the direction of Dr. **Walter J. Weber, Jr.**, is focused on the design of activated carbon adsorbers for the removal of synthetic organic chemicals (SOCs) with a special emphasis on the impact of background organic matter.

The Abel Wolman Doctoral Fellowship was established to honor the late Professor Abel Wolman by encouraging promising students from countries with AWWA sections to pursue advanced training and research in the field of water supply and treatment. Ms. Carter is the sixth student to receive the fellowship; the first three recipients, Drs. John Tobiason,

William Ball, and James Malley, are now environmental engineering professors at the U. of Massachusetts, Duke University, and the U. of New Hampshire, respectively. The fellowship provides up to \$15,000 per year in support for up to two years. Application forms may be obtained from AWWA by calling (303) 794-7711.

### 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 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 1990 awards were **Mark Schlautman**, a PhD candidate at the California Institute of Technology, and **Kevin Gardner**, an MS student at Clarkson University. Mark is studying the role of colloidal particles in the partitioning and transport of organic contaminants in aquifers. Kevin is investigating the impact of industrial leachates on groundwater quality.

### The Holly A. Cornell Scholarship

The Holly A. Cornell Scholarship was established this year by AWWA and CH2M-Hill to honor Cornell. The \$5,000 scholarship will be awarded each year to the most outstanding female of minority U.S. applicants pursuing an MS degree in Environmental Engineering. The recipient of the inaugural (1990) scholarship was **Kathryn Lee Mallon**, a graduate student at the U. of North Carolina, Chapel Hill. Kathryn is studying microbial activity on GAC under the direction of Dr. **Francis DiGiano** and hopes to someday use the skills to assist developing countries.

## **The Association of Environmental Consulting Firms**

In May of this year, a joint industry forum of representatives from consulting firms and individuals from allied professions formed the Association of Environmental Consulting Firms (AECF) in response to the growing need for standards, legislative liaison and access to errors and omission insurance at reasonable rates.

AECF sees its mission as providing leadership for the advancement of the environmental consulting industry throughout the country. AECF plans to accomplish that mission through the establishment of generally accepted guidelines assuring uniform quality in the area of environmental audits, assessment and management.

AECF is organizing educational programming for its membership. The AECF Fall Conference, its first educational meeting, is to be held November 11-12, 1990 at the Hotel Sofitel near Chicago's O'Hare International Airport.

During the May meeting, the charter group elected a board of directors. The following emerged as officers of the organization: James Kinsey, Roy F. Westin Co., Bannockburn, Ill., president; Liane Hetherington, ICF Kaiser Engineers Inc., Chicago, vice president; Doug Wierman, Warzyn Engineering, Inc., Addison, Ill., treasurer; and Tim O'Hagan, Environmental Risk Consultants, Inc., Evanston, Ill. secretary.

For more information on the Association of Environmental Consulting Firms (AECF) or its fall conference, please contact Glen Keller, executive director or Brian Pugliese, director of communications at (312) 644-6610.

## **NETAC Recommends Field Testing of Bioremediation Treatments on Alaskan Oil Spill**

The National Environmental Technology Applications Corporation (NETAC) at the University of Pittsburgh announced that they have recommended two promising commercial bioremediation treatments to the U.S. Environmental Protection Agency (EPA) for field testing this summer on oil-contaminated beaches in Prince William Sound, Alaska, resulting from the Exxon Valdez oil spill in 1989.

NETAC's recommendation was the result of comparative laboratory studies conducted during April and May on ten commercially available bioremediation treatments that had been previously identified by NETAC as showing promise for use in Alaska this year. The vendors for the two treatments recommended are Sybron Chemicals, Inc., of Salem, Virginia, and Environmental Remediation, Inc., of Baton Rouge, Louisiana.

Dr. John Skinner, Deputy Assistant Administrator for Research and Development at EPA, has accepted NETAC's recommendation and indicated that the two recommended products will now undergo bioassay testing to check for toxicity to marine organisms. If found environmentally acceptable, a field testing proposal will be submitted to the agencies responsible for cleanup of the Alaskan spill.

## **NETAC Awarded Contract to Evaluate Biotower Technology**

The National Environmental Technology Applications Corporation (NETAC) at the University of Pittsburgh Applied Research Center has been awarded a contract from Lancy International, Inc., an Alcoa Separations Technology Company headquartered in Pittsburgh and specializing in wastewater treatment design, manufacturer, and installation. NETAC will provide an independent review of Lancy's Biotower technology, a biological treatment system used in both the remediation of hazardous waste disposal facilities and treatment of industrial wastewaters.

## **University of Pittsburgh Signs Joint Environmental Agreement With Poland**

The Center for Hazardous Materials Research (CHMR) at the University of Pittsburgh has signed a joint agreement with the National Foundation for Environmental Protection in Warsaw, Poland, to work together on a wide range of environmental matters of importance to both nations.

The agreement was signed in Warsaw the first week in August by Samuel A. Schulhof, chairman of CHMR, and Andrzej Walewski, president of the National Foundation for Environmental Protection and vice minister, Ministry of Environmental Protection and Natural Resources, State Inspectorate for Environmental Protection.

The agreement pledges both parties to undertake projects that address the environmental and waste management problems associated with industrial, agricultural and urban areas. This effort will involve joint scientific and public policy research on environmental management and bilateral transfer of environmental technology.

The Center for Hazardous Materials Research, a subsidiary of the University of Pittsburgh Trust, was established in 1985 with a four-fold mission of education and training, technical assistance, applied research, and technology transfer. The National Foundation for Environmental Protection in Warsaw was established in 1988 as an independent non-governmental institution carrying on a wide range of environmental activities. It has 17 regional divisions in cities and towns throughout Poland.

# PERSONAL ACCOMPLISHMENTS

## Presidential Young Investigator Awards at Berkeley

Ten professors at the University of California at Berkeley have won Presidential Young Investigator Awards, given by the National Science Foundation to support the nation's top young scientists and engineers. The White House-sponsored program is intended to help universities attract and retain outstanding young faculty researchers in technical fields who might otherwise pursue non-teaching careers. Investigators can receive up to about \$100,000 per year for five years in a combination of federal and matching private funds to support their research.

Berkeley's Department of Electrical Engineering and Computer Science had four winners: Professors David Culler, Stuart Russell, Raimund Seidel and Avidesh Zakhor. The other Berkeley award winners and their departments are: Paul Alivisatos, Chemistry; Robert Full, Integrative Biology; **William Nazaroff, Civil Engineering**; Andrew Packard, Mechanical En-

gineering; Per Peterson, Nuclear Engineering; and Mark Richards, Geology and Geophysics.

## Outstanding Engineering Book

The book *Pumping Station Design* (**Robert L. Sanks**, AEEP, Editor-in-Chief, and co-editors **George Tchobanoglous**, AEEP, **B. E. Bosserman II**, and **Garr M. Jones**) was recognized as the most outstanding engineering book of 1989 by the 14th Annual Professional and Scholarly Book Awards sponsored by the Association of American Publishers. The selection was made from more than 200 books by a panel of independent judges from publishing, industry, medicine, and science.

The book, published by Butterworth Publishers, 80 Montvale Ave., Stoneham, MA 02180, was written by 32 authors and 100 other contributors. Sanks was author or co-author of 7 of the 29 chapters. The book contains 828 pages, 375 illustrations, and 59 examples. It covers all aspects of pumping station design and was written for the practicing professional, although there are parts that are suitable for classroom instruction.

# CONFERENCES AND EDUCATIONAL PROGRAMS

## Annual WPCF Conference

The Annual Conference of the Water Pollution Control Federation (WPCF), will take place in Washington, D.C. October 7-11, 1990.

The Conference, to be held at the D.C. Convention Center, is the nation's largest exposition on water pollution control technology and issues. It features five days of presentations and will attract more than 15,000 water quality experts from around the world. Over 125,000 net square feet will be filled with exhibits from about 450 participating companies.

Special guest speakers for the opening session on Monday, October 7, include Dr. Murray Feshbach, Georgetown University research professor and former chief of the USSR Population, Employment and Research and Development Branch of the Foreign Demographic Analysis Division of the U.S. Bureau of the Census, who will address pollution in the Soviet Union and Eastern Europe, and Dr. James R. Mahoney, Director of the National Acid Precipitation Assessment Program, who will present his personal look at results of the program's ten-year research effort. William K. Reilly, Administrator of the U.S. Environmental Protection Agency (EPA), and LaJuana

Wilcher, Assistant Administrator for water at EPA, are also scheduled to speak at this event.

Fifty-nine technical sessions will feature talks ranging from hazardous and industrial waste treatment and remediation to safety, regulatory, and compliance issues. Sludge management, public education, toxic substances, nonpoint source pollution, and marine water quality are a few more examples.

## Hydrocarbon Contaminated Soils: Analysis, Fate, Environmental and Public Health Effects, and Remediation

University of Massachusetts  
September 24-27, 1990

The Fifth National Conference will be held September 24-27, 1990 at the University of Massachusetts at Amherst. It will focus on topics to include the following: national and international approaches; field screening and analytical methodologies; remediation; risk assessment and management; regulatory policy; environmental fate/modeling; clean-up standards; real estate, banking and insurance issues;

petroleum product identification; and legal considerations.

For general information contact Paul T. Kostecki, PhD, Division of Public Health, University of Massachusetts, Amherst, MA 01003, or call (413) 545-2934. For information about exhibit booths, contact Charles Bell at (413) 545-4269 at the above address. Registration material has been available since June 1, 1990.

## IWEM Conferences and Symposia

IWEM has announced the following program of conferences, symposia and workshops:

### 1990

- 09/16-21 University of Reading  
Young Members' Study Tour:  
"Today's water industry -  
who does what and how".
- 10/02 Solihull  
"Redevelopment of contaminated  
land": a one-day symposium.
- 10/TBA London  
"Cryptosporidia in water":  
a one-day workshop.
- 11/14 London  
"Water privatisation - one year on":  
a seminar organized jointly  
with ICE.

### 1991

- 01/16 London  
"Water technology for the 90's":  
a seminar organized jointly  
with BEWA.
- 03/20 University of Loughborough  
"Continuous monitoring and the  
consequences for environmental  
control": a one-day symposium.
- 04/30 -  
05/02 International Convention  
Center, Birmingham  
IWEM 91: International Conference  
and exhibition on "Water and the  
Environment".
- 06/14-15 Portsmouth  
IWEM AGM and Summer Meeting:  
for Members only.
- 09/TBA Scotland  
Young Members' Study Tour.
- 10/08-09 Paris  
A two-day international conference  
on groundwater protection.

Detailed information on IWEM '90 "Design and construction of works for water and environmental management" was issued on June 18, 1990, and on "Redevelopment of contaminated land" on July 20, 1990. Information on the 'Young Members' Study Tour' is available from IWEM. Further information on all of the events may be obtained from Mrs. Lavinia Giffins, IWEM, London. (Tel. 071-831-3110).

## First International Symposium on Wastewater Reclamation and Reuse

Castell Platja D'Aro,  
Costa Brava, Gerona, Spain  
September 24-26, 1991

The first International Symposium on Wastewater Reclamation and Reuse is jointly organized by the Universidad Politecnica de Cataluna, Barcelona, Spain and the IAWPRC's Specialist Group on Wastewater Reclamation, Recycling and Reuse. The Sponsors of the Symposium are Consorcio de la Costa Brava, Direccion General de Obras Hidraulicas de la Generalitat de Catalunya, Direccion General de Obras Publicas y Urbanismo, Spain, and IAWPRC.

The main objective of the First Water Reuse Symposium is to provide an appropriate forum for discussing the scientific and technological advances made in water reuse, especially through case studies on full-scale water reuse projects in agriculture, industry, forestry, and urban utilities. The main topics to be covered in the International Symposium on Wastewater Reclamation and Reuse are:

- Planning and implementing wastewater reclamation and reuse programs
- Legal and financial aspects of wastewater reclamation and reuse
- Evaluation of wastewater reclamation technologies
- Reliability and adequacy of reclamation alternatives
- Agricultural irrigation and aquaculture with reclaimed municipal wastewater
- Groundwater recharge with reclaimed wastewater
- Wastewater reuse for industrial cooling
- Quality criteria for reclaimed water for various uses
- Health and environmental considerations for wastewater reuse
- Research needs for water reclamation technologies, and analytical and toxicological monitoring techniques

- Public attitude towards wastewater reuse
- Environmental impacts of wastewater reuse

#### *Paper Selection, Languages, and Publication*

Papers must be written in English with a maximum length of 5,000 words. Paper selection by the Scientific Committee will be based on full-text papers. Deadline for submission of the full-text papers is December 1, 1990. Selected papers may be orally presented in English, French, or Spanish. Simultaneous translation will be provided.

#### *Submission of Papers*

To submit your papers, please write to the following address and obtain special lay sheets and instructions for the camera-ready manuscript preparation:

Professor Rafael Mujeriego  
 Universidad Politecnica de Cataluna  
 ETS de Ingenieros de Caminos  
 Gran Capitan, s/n.  
 08034 Barcelona, Spain  
 ☎ (343) 401-6465  
 FAX: (343) 305-4766  
 (343) 401-6504

## **Symposium on Chemical Treatment**

Madrid, Spain  
 October 1-3, 1990

The 4th International Gothenburg Symposium on Chemical Treatment will be held in Madrid, Spain, October 1-3, 1990. For more information, write to:

Mrs. Agneta Lindquist  
 The International Gothenburg  
 Symposia  
 c/o Kemira Kemi AB  
 Box 902  
 S-251 09 Helsingborg Sweden

## **Biotechnology Forum on Valdez Oil Spill**

The Biotechnology Forum is conducting a workshop on the various aspects of the Valdez oil spill, on September 17-18, 1990, at the EPA Auditorium in Cincinnati. This workshop – sponsored by the Biotechnology Forum, the U.S. Environmental Protection Agency, Technical Resources, Inc., U.S. Department of Energy, The Society for Risk Analysis, University of Cincinnati, and the Sierra Club – is free and open to the public. For more information, call Gary Turner in Rockville, Maryland at (301) 231-5250.

## **PUBLICATIONS AVAILABLE**

### **Who's Who In Environmental Engineering**

The 1990 edition of *Who's Who in Environmental Engineering*, published by the American Academy of Environmental Engineers, is now available.

The book provides a complete listing of environmental engineers in all occupation groups, e.g., consulting, government, education, etc., who have proven to their peers through an extensive review and examination process that they have special knowledge in one or more of the following area:

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

Divided into three primary sections, this book lists environmental engineers alphabetically, by specialty

and by geography (state or foreign country). In addition, the book describes in detail the certification program that each person must satisfy to obtain this distinction along with historical and organizational data about the Academy.

Copies of this hardcover edition of *Who's Who in Environmental Engineering* can be purchased for \$60, postage paid, from the American Academy of Environmental Engineers, 130 Holiday Court, Suite 100, Annapolis, Maryland 21401.

### **Environmental Engineering Selection Guide**

The 1990 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 and all those professors who are certified environmental engineering specialists.

The Consulting Section of the Guide provides an alphabetical listing of environmental engineering firms which includes a description of the firm's services, its size and a list of certified engineers.

To obtain a free copy of the 1990 *Environmental Engineering Selection Guide*, write on your letterhead to the American Academy of Environmental Engineers, 130 Holiday Court, Suite 100, Annapolis, Maryland 21401.

## EMPLOYMENT OPPORTUNITIES

### University of Canterbury, New Zealand

Applications are invited for Senior Lecturer or Lecturer in the Department of Civil Engineering from suitably qualified candidates with a specialized knowledge of environmental engineering. The appointee will be expected to expand the teaching and research in environmental topics, at undergraduate and graduate level. Applicants should have expertise in one or more of the following areas: water and wastewater treatment, solid and hazardous waste management, atmospheric pollution and wider aspects such as environmental impact assessment. The successful candidate may also be required to contribute to other civil engineering undergraduate courses.

The salary for Senior Lecturers is on a scale from NZ\$ 50,000 to NZ\$ 58,600 per annum (bar), and a range from NZ\$ 60,800 to NZ\$ 64,500, and for Lecturers, a scale from NZ\$ 36,000 to NZ\$ 43,700 (bar), and from NZ\$ 45,000 to NZ\$ 47,200 per annum. Applications close on September 28, 1990.

Further particulars and Conditions of Appointment, quoting Position No. CE35, may be obtained from the undersigned to whom applications must be addressed: A.W. Hayward, Registrar, University of Canterbury, Private Bag, Christchurch, New Zealand. *The University has a policy of equality of opportunity in employment.*

### Clemson University

The Department of Environmental Systems Engineering at Clemson University invites applications for a tenure-track faculty position commencing August 1991. Applicants should have research experience and interest in any one or more of the following: physicochemical or biological technologies for treating wastewaters and hazardous wastes, or for remediating contaminated environments; environmental biotechnology; or environmental chemistry. Although preference will be given to applicants at the Assistant Professor level, exceptional candidates at other levels are encouraged to apply. The successful candidate must have outstanding research capabilities as well as a strong interest in teaching at the undergraduate and graduate levels, developing an active research program, and directing graduate student research. A PhD in environmental engineering - science or allied field is required. In-

terested candidates should submit a resume and the names, addresses, and telephone numbers of not less than three references to Professor Thomas M. Keinath, Head; Department of Environmental Systems Engineering; Clemson University; Clemson, SC 29634-0919. Review of applications will begin on November 15, 1990 and continue until the position is filled. *Clemson University is an Affirmative Action/Equal Opportunity employer.*

The Department of Environmental Systems Engineering at Clemson University invites applications for several non-tenure track research associate/assistant professor positions commencing January 1991. Applicants should have research experience and interest in any one or more of the following: physicochemical or biological technologies for treating wastewaters and hazardous wastes, or for remediating contaminated environments; radioactive waste management or environmental health physics; air pollution or air toxics control; environmental biotechnology; or environmental chemistry. The successful candidates must have outstanding research capabilities as well as expertise either in quality assurance/quality control procedures or sophisticated analytical instrumentation. A PhD in environmental engineering/science or allied field is required. Interested candidates should submit a resume and the names, addresses and telephone numbers of not less than three references to Professor Thomas M. Keinath, Head; Department of Environmental Systems Engineering; Clemson University; Clemson, SC 29634-0919. Review of applications will begin on October 15, 1990 and continue until the positions are filled. *Clemson University is an Affirmative Action/Equal Opportunity employer.*

### University of Connecticut

The University of Connecticut, Department of Civil Engineering invites applications for a tenure-track position in the area of Biochemical Processes in Environmental Engineering at the Assistant Professor level. Duties include teaching and advising undergraduate and graduate civil engineering students, developing a nationally-recognized sponsored research program and directing graduate research. Opportunities exist for close cooperation with The Environmental Research Institute at UConn. ERI is a research center administered through the School of Engineering encompassing 14 full-time research and support staff, over 30 affiliate faculty from 9 academic departments and fully-equipped and



staffed analytical laboratories. An Engineering degree, Civil Engineering preferred, and a PhD in an appropriate field are required. It is anticipated that this position will become available as of January, 1991. Forward curriculum vitae and the names of three references to Professor Domenic Grasso, Chairman, Search Committee, Department of Civil Engineering, The University of Connecticut, Storrs, CT 06269-3037. *The University of Connecticut is an Affirmative Action/Equal Opportunity Employer.*

## University of Massachusetts

The Environmental Engineering Program of the Department of Civil Engineering at the University of Massachusetts/Amherst invites applications for a tenure-track position in Environmental Engineering commencing September 1991. The candidate should be strong in the biological area of environmental engineering with teaching and research interests in one or more of the following: biological processes, bioremediation of groundwater aquifers, and biodegradation of hazardous substances. Preference will be given for candidates with or eligible for Professional Engineering registration. The position is at the Associate Professor or Full Professor level, and salary is commensurate with qualifications and experience. Responsibilities include graduate and undergraduate teaching and contributions to an active graduate research program. The Environmental Engineering Program is ABET accredited at the advanced level and has seven permanent faculty. There are 30 to 35 full-time MS and PhD students in Environmental Engineering, and 1989-90 research expenditures in the Program exceeded \$450,000. Interested candidates should send a resume and names of at least three references to Professor James K. Edzwald, Department of Civil Engineering, Environmental Engineering Program, University of Massachusetts, Amherst, MA 01003

Applications will be reviewed beginning October 1, 1990 and will be accepted until the position is filled. *The University is an Affirmative Action/Equal Opportunity employer.*

## University of Minnesota

The Department of Civil and Mineral Engineering invites applications for an entry-level tenure-track faculty position. The successful applicant must have a PhD or equivalent degree by time of appointment. The candidate is expected to have a strong commitment to research and teaching at the undergraduate and graduate levels, including the

advising of MS and PhD students, and the production of scholarly publications. Vigorous interaction with community of environmental and water resource engineers is desired. Eligible candidates should have academic training and research interest in the application of microbiological principles to environmental processes and engineering problems. Example areas of specialization include: environmental microbiology, biochemical engineering, and microbiological processing. Position will be available December 16, 1990.

Please send a detailed resume and names of three or more references to Dr. W. Maier, Dept. of Civil Engineering, 500 Pillsbury Drive SE, Minneapolis, MN 55455. Application deadline is September 30, 1990. *The University of Minnesota is an equal opportunity educator and employer and specifically invites and encourages applications from women and minorities.*

## Rensselaer Polytechnic Institute

Rensselaer Polytechnic Institute announces the availability of a tenure-track academic position in Environmental Engineering. The area of specialization is flexible, however, we are seeking outstanding candidates who can fit into a group that puts emphasis on integrated process design. Research interests include water and air resources, hazardous waste management, mathematical modeling, and radioactive waste disposal, among others. This position is open at any level. Responsibilities include undergraduate and graduate teaching and research. Preference will be given for candidates eligible for Professional Engineering registration.

Within the Environmental Engineering and Environmental Sciences Department, an ABET accredited Bachelor of Science degree is offered, one of the few such accredited programs in the United States. Graduate programs leading to the Master of Science, Master of Engineering, PhD, and D.Eng. degrees are also well established. The department presently has four faculty, 40 undergraduate students, and 30 full-time and 30 part-time graduate students. Interested candidates should send a resume and names of three references to Professor Nicholas L. Clesceri, Environmental Engineering, Rensselaer Polytechnic Institute, Materials Research Center - Room 203, Troy, NY 12180-3590. If you need any additional information, please contact Professor Clesceri at (518) 276-6416 or FAX (518) 276-8554. Applications will be accepted until the position is filled. *Rensselaer is an Equal Opportunity/Affirmative Action Employer.*

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
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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

# NEWSLETTER

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