Association of Environmental Engineering Professors



Volume 33, No. 1

Published three times yearly by AEEP

January 1998

In this issue...

AEEP News and Announcements3
Organizations of Interest8
Employment Opportunities9
Publications13
Book Reviews13
Conferences/Calls for Papers14
Application19

1998 AEEP dues

Notices regarding

current annual
dues have been
sent to all AEEP
members.
Dues remain the
same as last year
(see form on page
19) and payment
should be made by
January 15.



President's Letter

Dear Friends and Colleagues:

When this organization was founded thirty-four years ago, as the American Association of Professors in Sanitary Engineering (AAPSE), the world was a much bigger place. Perhaps that is why the Founders restricted our membership to Professors in North America. Advances in communications by fax, overnight mail, e-mail, and the internet, however, have transformed the planet, making it seem much smaller today. We can expect further advances such as teleconferencing to continue this trend. As the world has gotten smaller, the Environmental Engineering (EnvE) market has increased in scope and size. Pollution issues have grown from simple point-source pollution of rivers to include global pollution modeling. We now live in a global economy, and the construction of water and wastewater treatment facilities overseas and in the third world is now one of the fastest growing markets for consulting engineers.

Thus, it seems time to open membership in AEEP to the global community and to accept that we are teaching students who will participate in a global community, who will need to address pollution concerns in a variety of legal, social and economic contexts. At the AEEP Board meeting in October 1997, it was recommended that we begin discussions within the organization to change the membership bylaws to open our member rank to those outside North America. It is now possible by e-mail to conduct most of our business without concern for whether someone is in Africa, Peru, or just down the hall. By way of this letter and through messages carried over e-mail and internet postings, I would like to initiate discussion on this topic of membership so that we may vote on this issue for a bylaw amendment sometime in summer 1998.

If you have logged onto our internet site (www.aeep.org), you know that the internet has transformed the way that AEEP conducts business and disseminates information. Undergraduates interested in a graduate degree can link to the web pages for most of our programs from the AEEP web site. Many students near graduation indicate that they log on nearly daily to view job postings. A few professors have begun to provide downloadable programs and course information and I hope that this type of activity will increase in the future. This site, created by Kurt Paterson at Michigan Tech, provides the ideal vehicle for the dissemination of Environmental Engineering education materials. In the future, much of what AEEP does will be facilitated by this web site and e-mail.

Almost all of us have an e-mail address. If you don't have one, I encourage you to get one soon. AEEP is moving away from costly mailings. However, only about one-third of our members have requested to be on our current electronic mailing list and those not on the e-mail list may not receive some announcements. If you have not requested to have your e-mail address added to the AEEP electronic mailing list, please e-mail Kurt (paterson@mtu.edu). In the near future, you will be contacted by regular post and asked whether you would prefer e-mail or regular mail announcements.

There are other changes being pondered by the Board that all AEEP members should discuss. Over the years we have seen our role as engineers change, and this change has been reflected in the name of our organization. Following shifts in societal concerns and our professional activities that moved from sanitary engineering topics to larger, environmental concerns, the American Sanitary Engineering Intersociety Board (ASEIB) changed its name in 1966 and voted to form the American Academy of Environmental Engineers (AAEE). Subsequently, other organizations such as ASCE and ours followed suit and in 1972, AAPSE became AEEP. Within our own organization we have had increasing participation by

(Continued on page 2)

March 2, 1998

is the **DEADLINE** for submitting copy for the

APRIL'98 **AEEP News**



Association of Environmental Engineering Professors Newsletter

Association of
Environmental
Engineering
Professors
Newsletter

The AEEP Newsletter is published January, April, and
September by the Association of
Environmental Engineering
Professors, 2208 Harrington
Court, Champaign, IL 61821.

Roger L. Ely, Editor
Cindy Lawrence, Layout
Dept. of Civil Engineering
University of Idaho
Moscow, ID 83844-1022
ely@uidaho.edu
phone (208) 885-2980
fax (208) 885-6608

Please send submissions and
comments to the editor. To
estimate the amount of lead
time needed for your announcement, please note that AEEP
members receive the newsletter
about 6 to 8 weeks after the
submissions deadline.

(Continued from page 1)

scientists, fueling the debates about the role AEEP should play in scientific endeavors. The truth is, many AEEP members who received their B.S. degrees in scientific fields now teach and do research in EnvE. Scientific research has grown to become an important component of our programs, and many of us have collaborative projects with scientists. It has been recommended by the Long Range Planning Committee that we change our name to reflect the scientific component of our research and teaching endeavors, and I concur. The suggested name change is to simply include the S-word, or to rename the organization the Association of Environmental Engineering and Science Professors (AEESP). I look forward to discussions on this topic, and I hope that we might consider this change along with our membership change this year.

We have had many new members over the past few years, and I am not sure that they have a good sense for the way AEEP conducts its activities. The real action in AEEP occurs through committees. If we need something done, we appoint a committee chairperson and a committee to do it. Thus, we have committees to plan our Research and Education Conferences, to assist student organizations, to publish the Graduate Register, and so forth. These are listed in the AEEP Directory, although the most current list is available on our internet site. I'd like to see the day when everyone in the organization serves on some committee at some time within a three-year period. That might mean more committees, but it would also mean that we could accomplish more as an organization. I encourage you to volunteer to participate on an existing committee or to form and direct a new one. One personal effort that I began nearly a year ago was to look at how the EnvE profession might increase our visibility in organizations such as NSF, DOE, EPA, and NIEHS, in order to gain additional funding for EnvE research. Often we hear about environmental science research, but engineering is often neglected in broad agency announcements. I am pleased to report that in January 1998 I will cochair with Charlie O'Melia an NSF-funded workshop, "Environmental Engineering Frontiers". The purpose of this meeting will be to construct a national research agenda on EnvE topics. This workshop will be composed of ten members of the National Academy of Engineers (NAE) who are active in the EnvE area and five members of AEEP. It is hoped that such an agenda will help researchers in our organization focus on critically important environmental topics and increase participation by engineers in science-driven research. My personal hope is that as an EnvE community, we can find big projects to cooperate on in the same way that scientists and engineers work together in other areas. Examples of other big projects are the Hubble telescope and the project to sequence the human

Aarne Vesilind remarked to me that the year you spend as the President of AEEP is just about over as soon as it begins. I have outlined an ambitious agenda for this next year but I hope that the year will not go too fast for all of us to take the time to consider the changes I have described. I hope that we will all take the time to decide how best to fulfill our emerging role as a global environmental engineering and science profession.

> -Bruce Logan, Penn State University blogan@psu.edu

Submission of Professional Society information to the AEEP Newsletter and the AEEP WWW site Newsletter

Dr. Roger Ely is the editor of our AEEP Newsletter. Roger requests that submissions of news items be made electronically, either by e-mail or on a disk, so that they do not have to be retyped. However, he adds that if electronic submission is not possible, he'll take information anyway that you can get it to him. Roger's contact information is as follows:

Dr. Roger L. Ely University of Idaho Department of Civil Engineering Moscow, ID 83844-1022 e-mail: ely@uidaho.edu

phone: 208-885-2980 fax: 208-885-6608

Dr. Kurtis Paterson, a new AEEP Board member, is chair of the AEEP Electronic Communication and Education Committee and developer and maintainer of our very popular www site (http://www.aeep.org). News notes for posting on the www site can be sent to Kurt for posting, preferably by e-mail. Kurt's contact information is as follows:

Dr. Kurtis G. Paterson Michigan Technological University Department of Civil and Environmental Engineering 1400 Townsend Drive Houghton, MI 49931-1295 e-mail: paterson@mtu.edu phone: 906-487-3495

fax: 906-487-3292

AEEP News and Announcements

1997 AEEP award winners

The following awards were presented by AEEP President James C. Young, except as noted.

1997 Founders' Award
- Linvil G. Rich -

For Sustained and Outstanding Contributions to Environmental Engineering Education

1997 Outstanding Paper Award
- Appiah Amirtharajah and Kirk M. Mills "Rapid-Mix Design for Mechanisms of Alum Coagulation"

1996-97 Distinguished Lecturer
- William Pretorius -

1997 AEEP/CH2M Hill Outstanding Doctoral Dissertation Award
- James E. Anderson -

"Effect of Chlorinated Ethene Biodegradation on Growth Rates of Methanotrophic Bacteria in Biofilms and Mixed Cultures" Perry L. McCarty, advisor (Presented by Glen Daigger)

1997 AEEP/Parsons Engineering Science Outstanding Doctoral Dissertation Award

- Xiaoyan Li -

"Coagulation between Fractal Aggregates and Small Particles and Fractal Properties of Marine Particles" Bruce E. Logan, advisor

(Presented by Nick Presecan, senior vice-president)

1997 AEEP/Montgomery-Watson Master's Thesis Award
- Kevin T. Russell, First Place -

"The Use of Decision Analysis for Groundwater Remediation Design"

Alan J.Rabideau, advisor

- Matthew E. Griffin, Second Place -

"Use of Molecular Tools to Enhance the Evaluation of Anaerobic Co-Digestion of the Organic Fraction of Municipal Solid Waste and Sewage Sludge"

Lutgarde Raskin, advisor (Presented by Monica Oakley, principle engineer)

Distinguished Service

- Jo Ann Silverstein -

In Appreciation for Distinguished Service as AEEP Secretary

- R. Scott Summers -

In Appreciation for Distinguished Service as AEEP Awards Committee Chair, 1995-97

> - James C. Young -President, 1996-97 (Presented by Bruce E. Logan)

New directors and officers

Congratulations to the new Directors of AEEP who were elected for the 1997-2000 term: **Robin Autenrieth** of Texas A&M, **Kurt Paterson** of Michigan Tech, and **Debra Reinhart** of Central Florida.

Newly elected officers are **Bruce Logan** of Penn State, President; **Kimberly Gray** of Northwestern, Vice President; **David Dzombak** of Carnegie Mellon, Treasurer; and **Jerry Schnoor** of Iowa, Secretary. Past President is **Jim Young** of Arkansas.

AEEP Founder's Award

Linvil G. Rich, Professor Emeritus at Clemson University, was awarded the 1997 AEEP Founders' Award at the Annual Meeting. This award is given annually to recognize an AEEP member who has made "sustained and outstanding contribution to environmental engineering education and the profession."

Nominations are being sought for the 1998 AEEP Founders' Award. Nominations may be made by communicating the name of the nominee to the chair of the awards committee, R. Scott Summers, Department of Civil and Environmental Engineering, P.O. Box 21071, University of Cincinnati, OH 45221-0071, telephone (513) 556-3692, or fax (513) 556-2599. The deadline for nominations to be assured of receiving full consideration is March 15, 1998. The award will be presented by the President at the annual AEEP meeting in October. Previous recipients of the AEEP Founders' Award are:

1991 E. Robert Baumann, Iowa State University

1992 Perry L. McCarty, Stanford University

1993 Richard Engelbrecht, University of Illinois

1994 Daniel A. Okun, University of North Carolina-Chapel Hill

1995 Charles R. O'Melia, Johns Hopkins University

1996 Earnest F. Gloyna, University of Texas at Austin

1997 Linvil G. Rich, Clemson University



Call for Nominations for 1998 J.M. Montgomery/AEEP Master's Thesis Awards

Entries are sought for the 1998 Montgomery-Watson Master's Thesis Awards. First and second place awards will be given, each consisting of a plaque and a cash prize for both the student and the faculty advisor. The case prize for the first place award is \$600 for the student and \$300 for the faculty advisor; the amounts for the second place award are \$400 and \$200, respectively. Faculty advisors wishing to compete should send three copies of the thesis to:

Dr. Susan E. Powers
Department of Civil & Environmental Engineering
W.J. Rowley Laboratories
Clarkson University
Potsdam NY 13699-5710

Please submit nominations of theses completed during the 1997 calendar year by March 15, 1998. They should be accompanied by a simple letter of transmittal stating the student's current address and indicating when the thesis was completed. The copies will not be returned, so xerographic copies inexpensively bound are recommended. Faculty advisors are urged to limit themselves to a single entry (which will be considered for each of two awards); self nominations by students will not be accepted.

A selection committee of three AEEP members will read and judge each thesis on the basis of 100 points allocated as follows: scientific and technical merit of the research - 30 points; originality of research - 30 points; contribution to advancement of environmental engineering - 30 points; and, clarity of presentation - 10 points. The selections will be made by September so that the recipients and their advisor can be invited to the AEEP meeting at the WEF meeting. Any questions regarding this award or procedures for nominating students can be addressed to Susan Powers at her e-mail address, sep@draco.clarkson.edu.

Our thanks to Montgomery-Watson for their generosity in sponsoring these awards and to the members of the 1997 MS Thesis Review Panels, Marc Edwards (Chair), Susan Powers, and Nancy Love.



Amit Amirtharajah, right, receives 1997 Outstanding Paper Award from President Jim Young.

Call for nominations for 1998 AEEP Outstanding Paper Award

Nominations are sought for the 1998 AEEP Outstanding Paper Award for a "landmark paper that has withstood the test of time." Nominators should send a copy of the paper and a letter (two pages maximum) to R. Scott Summers, Department of Civil and Environmental Engineering, P.O. Box 21071, University of Cincinnati, OH 45221-0071. The letter should give the citation, the reasons why the paper is considered a "landmark," and a description of the influence the paper has had on the practice of environmental engineering. Nominations must be made by members of AEEP who are not an author or co-author of the paper; they are due July 1, 1998.

According to the current rules of the competition, any author of a winning paper is ineligible in the competition for a period of three years, and at least one of the authors must be living. The winners since 1985:



Congratulations to Master's Thesis Award recipients, Kevin Russell (left), first place, with his advisor, Alan J. Rabideau, and Matthew Griffin (right), second place, with Monica Oakley, who presented the awards.



- 1985 McCarty, P.L., and A. W. Lawrence, "Unified Basis for Biological Treatment Design and Operation," *J. San. Engrg. Div., ASCE*, June, 1970.
- Dick, R.I., "Role of Activated Sludge Final Settling Tanks," J. San Engrg. Div. ASCE, April, 1970.
- Dick, R.I. and B.B. Ewing, "Evaluation of Activated Sludge Thickening Theories," *J. San Engrg. Div., ASCE*, August, 1967.
- 1988 McCarty, P.L. "Anaerobic Waste Treatment Fundamentals," *Public Works*, September-December, 1964.
- 1989 Weber, W.J., Jr., and J.C. Morris, "Kinetics of Adsorption on Carbon from Solution," and "Equilibria and Capacities for Adsorption Carbon," *J. San. Engrg. Div.*, *ASCE*, April, 1963 and June, 1964.
- 1990 O'Conner, Donald J., "Oxygen Balance of an Estuary," J. San. Engrg. Div., ASCE, 86, SA3, 35-55, May 1960.
- 1991 Yao, K.M., M.T. Habibian, and C.R. O'Melia, "Water and Waste Water Filtration: Concepts and Applications," *Envir. Sci. & Tech.*, 5(11), 1105, May 1971.
- 1992 Argaman, Y., and W.J. Kaufman, "Turbulence and Flocculation," J. San. Engrg. Div., ASCE, 96, SA2, 223-241, April 1970.
- 1993 Stevens, A.A., and J.M. Symons, "Measurement of Trihalomethane and Precursor Concentration Changes," *Jour. Amer. Water Works Assn.*, 69:10:546, 1977.
- 1994 Morel, F.M.M., and J.J. Morgan, "A Numerical Method for Computing Equilibria in Aqueous Chemical Systems," *Envir. Sci. & Tech.*, 6:58-67, 1972.
- 1995 Sezgin, M., D. Jenkins, and D.S. Parker, "A Unified Theory of Filamentous Activated Sludge Bulking," *Jour. Water Poll. Con. Fed.*, 50, 2, 362-382, 1978.
- 1996 Rajagopalan, R., and C. Tien, "Trajectory Analysis of Deep-Bed Filtration with the Sphere-in-cell Porous Media Model," *AIChE Journal*, 22, 523-533, 1976.
- 1997 Amirtharajah, A., and K.M. Mills, "Rapid-Mix Design for Mechanisms of Alum Coagulation," *Journal Amer. Water Works Assn.*, 74 (4) 210-216, 1982.

Please take a few moments to reflect on the papers that you think have had the greatest impact on environmental engineering and consider nominating one of them for this award. Note that papers in all areas of environmental engineering, including air pollution, water quality, solid waste, hazardous waste, etc. are eligible.

Call for nominations for 1998 CH2M Hill and Parsons Engineering Science Doctoral Dissertation Awards

Entries are sought for the 1998 Outstanding Doctoral Dissertation Awards. Two awards will be given, each consisting of a plaque and a cash prize of \$1000 for the student, and a plaque and a cash prize of \$500 for the faculty advisor. Faculty advisors wishing to compete should send three copies of the dissertation to: Pratim Biswas, Department of Civil and Environmental Engineering, PO Box 21071, University of Cincinnati, OH 45221-0071. The dissertations should be accompanied by a simple letter of transmittal



Bruce Logan, left, accepts 1997 Outstanding Doctoral Dissertation Award as advisor for Xiaoyan Li, presented by Nick Presecan.

stating the student's current address and indicating when the dissertation was completed. The copies will not be returned, so xerographic copies inexpensively bound are recommended. The deadline for submission is March 15, 1998 for dissertations completed during the 1997 calendar year. Faculty advisors are urged to limit themselves to a single entry (which will be considered for each of two awards); self nominations by students will not be accepted.

A selection committee of three AEEP members will read and judge each dissertation on the basis of 100 points allocated as follows: scientific and technical merit of the research--30 points; originality of research--30 points; contribution to advancement of environmental engineering--30 points; and, clarity of presentation--10 points. The selections will be made by September so that the recipients and their advisors can be invited to the AEEP meeting at the WEF meeting. Our thanks to Parsons Engineering Science and CH2M-Hill for their generosity in sponsoring these awards and to members of the 1996 Doctoral Dissertation Review Panel, Gary Amy (Chair) and Pratim Biswas.

1998 AEEP Distinguished Lecturer Jerald L. Schnoor

Dr. Jerald L. Schnoor of the University of Iowa, has accepted the invitation to serve as the AEEP Distinguished Lecturer for 1998. Dr. Schnoor has agreed to prepare two lectures entitled a) Phytoremediation, and b) Eco-logic: An Environmental Perspective on Global Change and Sustainable Development. The lecture tour will be arranged during the spring semester of 1998 at a projected number of 10 to 12 locations. Institutions interested in hosting Dr. Schnoor should send a letter of request with appropriate documentation as soon as possible to: Makram T. Suidan, Chair, AEEP Distinguished Lecturer Committee, Department of Civil and Environmental Engineering, University of Cincinnati, Cincinnati, OH 45221-0071; e-mail msuidan@boss.cee.uc.edu; phone (513) 556-3695; fax (513) 556-2599. This request should include the following information:

- 1. Name and address of host institution and contact person;
- 2. Identity of possible co-sponsors;

- Arrangements for publicity, accommodations and possible video taping of lecture; and
- A brief statement describing how a visit by Dr. Schnoor would benefit and complement current academic activities.

Expenses associated with the lecture tour are shared by the host institution on a total lump sum, fixed cost basis. It is estimated that each institution would contribute approximately \$850 to cover travel and living expenses, as well as provide a modest honorarium. Responsibility for final choice of the lecture tour will rest with the AEEP Distinguished Lecturer Committee who will make that selection on the basis of information received.

Special consideration will be given to institutions who have not been visited by the Distinguished Lecturer within the past year or two. The research and teaching focus at the candidate institutions and the possibility of having more than one institution cohost the event will also be considered. The members of the AEEP Distinguished Lecturer Committee are pleased with the prospect for another successful tour and look forward to a timely receipt of invitations to participate as hosts.

Following are brief abstracts of the proposed presentations:

Phytoremediation. Phytoremediation is the in-situ cleanup and stabilization of contaminated soils and groundwater by vegetation. It has been used with success to remediate hazardous waste sites, to treat landfill leachates, to take up contaminants in

created wetland systems, and as a cap and closure at municipal landfills. Metals (Pb, As, Cd, Cs, Sr, U), nutrients, and organic contaminants (TCE, BTEX, TNT, RDX, PAHs, pesticides) from petrochemical spills, ammunition wastes, chlorinated solvent plumes, pesticide mixing and loading sites, metal and mining wastes, and radionuclide mixed wastes have been treated by phytoremediation systems. Many trees, grasses, wetland species, and legumes have been employed. The technology is gaining acceptance in the field with more than 150 demonstrations, pilot, and full scale projects now on line. It promises low cost, aesthetic advantages, and long term effectiveness. Advantages and limitations are discussed.

Eco-logic: An Environmental Perspective on Global Change and Sustainable Development. Greenhouse gases are increasing in the atmosphere at about 0.5% each year. The threat of climate change has caused 1500 of the world's scientists to declare that "the balance of evidence suggests a discernable human influence in global climate" (Intergovernmental Panel on Climate Change, 1996). Yet, the world has been slow to act, and emissions continue to increase. What should be the proper role of governments and people to the threat of environmental degradation in the 21st century? And what should be our role as environmental engineers in assuring a sustainable future?

1998 AEEP Liaison Committee

Cliff Davidson	Association of Atmospheric and Aerosol Research	AAAR	
Mohamed Dahab	American Academy of Environmental Engineers	AAEE	
Mike Aitken	American Institute of Chemical Engineers	AIChE	
Janet Hering	American Chemical Society	ACS	
Mark Rood	Air and Waste Management Association	AWMA	
Marc Edwards	American Water Works Association	AWWA	
Gary Amy	American Water Works Assoc. Research Foundation	AWWARF	
Debra Reinhart	American Society of Civil Engineers	ASCE	
Amy Zander	American Society for Engineering Education	ASEE	
Michael Gealt	American Society for Microbiology	ASM	
Claire Welty	American Geophysical Union	AGU	
Alex Mayer	National Ground Water Association	NGWA	
Mort Barlaz	Solid Waste Association of North Akmerica	SWANA	
Sam McClintock	Water Environment Federation	WEF	
Scott Weber	Water Environment Research Foundation	WERF	
John Novak	USA National Committee of IAWQ	USANC-IAWQ	
James Heaney Universities Council on Water Resources		UCOWR	

1998 AEEP Liaison Committee

AEEP Board member, **David Dzombak**, is the new chair of the Liaison Committee. As Liaison Committee Chair, David will serve as the interface between the AEEP Board and all liaison activities. Liaison Committee members will be asked to submit a brief report (e.g., a short e-mail message) to the chair, for transmittal to the Board, in April and September of each year. This report should summarize information transmitted to AEEP members, and outline any possibilities for joint activities. All joint activities require AEEP Board approval.

The job of an AEEP liaison to another professional society is to keep informed about relevant activities at the other society and to bring to the attention of the AEEP Board, through David Dzombak, those activities of potential interest to AEEP members, as well as opportunities for joint activities such as co-sponsorship of conferences, joint committee exploration of a topic of mutual interest, etc. The primary task will be to identify activities or

products of significant interest to AEEP, and to communicate those to AEEP members via a note to the AEEP Newsletter editor or the AEEP web site editor.

One potential joint activity in which there is clearly member interest is in holding meet-and-greet receptions at national conferences. AEEP has held a reception at the WEF annual conference for many years, and it is always well attended and appreciated. A morning breakfast buffet was held for the first time at this year's AWMA meeting in Toronto and was attended by 15 people. AEEP members and the AEEP Board would like to have receptions at more conferences. The reception at the WEF conference is underwritten by corporate sponsors. While the AEEP Board would expect external sponsorship for receptions at conferences, the Board is willing to consider partial or even complete AEEP funding of the first AEEP event at a conference. Proposals for such receptions should be directed to David Dzombak, who will bring them to the full AEEP Board.

1998 AEEP Committees							
Committee	Chair	Board Contact					
AEEP Graduate Programs Register	Domenico Grasso	Kurtis G. Paterson					
AEEP Undergraduate Programs Register	James C. Young	James C. Young					
Archives	Richard W. Walters	Jerald L. Schnoor (Secretary)					
Arrangements	Kimberly A. Gray (Vice President)						
Audit	Brian A. Dempsey	David A. Dzombak (Treasurer)					
Awards	Amy Zander	David A. Dzombak					
Bylaws	Mark M. Benjamin	James C. Young					
Distinguished Lecturer	Makram T. Suidan	Debra R. Reinhart					
Diversity	(vacant)	Robin L. Autenrieth					
Education Conference	(vacant)	James C. Young					
Electronic Communication and Education	Kurtis G. Paterson	David A. Dzombak					
Genealogy	P. Aarne Vesilind	James E. Alleman					
Latin American Activities	Hector R. Fuentes	Bruce E. Logan					
Legislative Affairs	(vacant)	Jerald L. Schnoor					
Liaison Committee	David A. Dzombak	David A. Dzombak					
Long-Range Planning	Menachem Elimelech	Kimberly A. Gray (Vice President)					
Membership	Radisav D. Vidic	Jerald L. Schnoor (Secretary)					
Newsletter	Roger L. Ely	Chet A. Rock					
Nominating	James C. Young (Past President)	James C. Young (Past President)					
Publications	Robin L. Autenrieth	Robin L. Autenrieth					
Research Needs Conference	Bruce E. Logan	Debra R. Reinhart					
Student Organizations	James R. Mihelcic	Kurtis G. Paterson					
Sustaining Members	David A. Dzombak	Kimberly A. Gray					
Textbook Review	P. Aarne Vesilind	Chet A. Rock					
Workshops, Lectures, Receptions	Bruce E. Logan	Kimberly A. Gray (Vice President)					

Organizations of Interest

ASCE awards David Dzombak

David A. Dzombak, Associate Professor of Civil and Environmental Engineering at Carnegie Mellon University, received the Walter L. Huber Civil Engineering Research Prize from the American Society of Civil Engineers at the Society's annual convention and exposition October 8 in Minneapolis. Recognizing Prof. Dzombak for notable achievements in research related to civil engineering, the award was presented by ASCE President Edward O. Groff.

Prof. Dzombak was honored for his research on physical-chemical processes affecting contaminant behavior in natural aquatic systems and in water and soil treatment processes. His previous honors include the Harrison Prescott Eddy Medal from the Water Environment Federation in 1993 and selection as a Presidential Young Investigator by the National Science Foundation in 1991. He earned a B.A. degree in mathematics from St. Vincent College, B.S. and M.S. degrees in civil engineering from Carnegie Mellon University, and a Ph.D. in civil engineering from the Massachusetts Institute of Technology. He is a registered professional engineer in Pennsylvania and a Diplomate of the American Academy of Environmental Engineers.

Founded in 1852, ASCE represents more than 120,000 civil engineers worldwide and is America's oldest national engineering society.

1999 Blasker Award for Environmental Science and Engineering

The Blasker Award for Environmental Science and Engineering is a new award aimed at encouragement and recognition of contributions that address significant environmental problems. The cash award of \$250,000 will be made to an individual or group of individuals who provide the most creative and innovative original contribution leading toward a solution of a specific environmental problem. The 1999 Blasker Award for Environmental Science and Engineering will be given for innovative science and technology achievements contributing to creation or maintenance of sustainable supplies of water to meet a wide range of needs including agricultural, industrial and domestic use, and the maintenance of natural ecosystems.

For more information and an application, please visit the Blasker Award web site at http://www.blasker.org; fax a request for information to (619) 239-1710; or write to: The Blasker Award, 1420 Kettner Blvd., Suite 500, San Diego, CA, USA 92101-2431. No telephone calls, please. Completed applications must be postmarked between November 1 and November 15, 1998.

The Blasker Award is made possible through the Blasker-Rose-Miah Endowment Fund established in 1992 at The San Diego Foundation.

AWWA scholarships

The new AWWA scholarship coordinator is Veronica Baca. Please direct your inquiries to her instead of Lois Sherry. Her phone number is the same as Lois's old number, (303) 347-6206, and her e-mail address is vbaca@awwa.org. There is also information available on the scholarship page of the AWWA web site at www.awwa.org/tande/eduframe.htm.

ASM sponsors Fellowship and Visiting Professorship programs

The Board of Education and Training of the American Society for Microbiology sponsors the following programs:

- ASM/NIGMS Visiting Scientists Program—designed to motivate minority students toward careers in scientific research,
 ASM members serve as visiting scientists to institutions with significant minority student enrollment.
- Burroughs Wellcome Visiting Professorship Program—intended to stimulate interest in the microbiological sciences and to recognize eminent scientists in the field.
- Undergraduate Research Fellowships—designed to encourage students to pursue careers or advanced degrees in the microbiological sciences by providing an opportunity to participate in a research project and gain experience by presenting research results at a national or regional meeting.
- Faculty Fellowships—provide funds for research training to enhance teaching. ASM members who are full-time faculty and either under-represented minorities or teaching at institutions with a large proportion of minority students may apply.
- Microbial Discovery Workshops—team an ASM member with a pre-college teacher to explore how the microbial world can be used to stimulate interest in science for all students. Grants cover registration for participants in the fourday workshops in summer 1998.

In addition, the *Focus on Microbiology Education* newsletter, available in print or on the ASM home page at http://www.asmusa.org/edusrc/edul.htm, features articles on topics of concern to faculty and tips for lab and technology for teaching. For more information or to view ASM program information, visit the ASM web site at http://www.asmusa.org.

Clemson changes dept. name

Effective immediately, the Department of Environmental Systems Engineering at Clemson University has changed its name to the Department of Environmental Engineering and Science. The new name was chosen because 1) it is more descriptive of the combined engineering and science program and faculty now in the department; 2) it avoids confusion with the area now known as "systems engineering"; 3) it is more consistent with similar departments around the country; and 4) it is more de-

scriptive to prospective students, faculty, and funding agencies. There are no program changes associated with the name change. The department continues to offer graduate degrees, an undergraduate minor, and undergraduate courses. Degrees will have the name Environmental Engineering and Science, with courses having the designation EES. The department provides the focus for environmental engineering at Clemson and will continue to participate in the campus-wide Environmental Science and Policy (ENSP) Program and work with other departments and programs from around campus to contribute to both undergraduate and graduate education in environmental science.

NSF names new program director

The new Program Director for Environmental Technology (emphasizing pollution prevention) at the National Science Foundation is **Dr. A. Fred Thompson**. He received M.S. (1965) and Ph.D. (1968) degrees in Environmental Health Engineering from Cal Tech and a B.S. from Penn State in 1963. He has been with Roy F. Weston, Inc. since 1967, starting as a Project Engineer and most recently serving as Chairman of the Board from 1991-1996.

Employment Opportunities

Purdue University LEE A. RIETH PROFES-SORSHIP IN ENVIRONMENTAL ENGINEERING. Purdue University's School of Civil Engineering invites applications for the endowed Lee A. Rieth Professorship in Environmental Engineering. Candidates for this position should be recognized nationally and internationally for scholarship in the field of environmental engineering and science. Qualified candidates will possess an earned doctoral degree and have a distinguished record of research and teaching appropriate for appointment as a tenured Full Professor with an endowed chair. The successful applicant should provide synergistic leadership directed at promoting excellence in academics and research. Primary selection criteria will include: a record of sustained scholarly performance, demonstrated excellence in teaching and research, and evidence of intellectual leadership. The Rieth Professorship offers the opportunity and challenge to share in the future growth and development of an internationally recognized university. The Environmental and Hydraulic Engineering Area within the School of Civil Engineering has twelve (12) faculty and a graduate enrollment of approximately eighty (80) students. The Indiana Clean Manufacturing Technology and Safe Materials Institute and the Indiana Water Resources Research Institute are affiliated with the School of Civil Engineering, and the area faculty are actively involved in the Universitywide Environmental Science and Engineering Institute. For full consideration, please send a detailed curriculum vitae and the names, addresses and telephone numbers of four references to: Vincent P. Drnevich, Professor and Head, School of Civil Engineering, 1284 Civil Engineering Building, Purdue University, West Lafayette, IN 47907-1284. Review of applications will begin on February 1, 1998 and continue until the position is filled. Minority and women candidates are encouraged to apply. Purdue University is an Equal Opportunity/Affirmative Action employer.

University of Iowa

ENVIRONMENTAL ENGINEERING. Applications are invited for an assistant professor in the environmental engineering and science program of the Department of Civil and Environmental Engineering at the University of Iowa. Salary and benefits are excellent. Candidates should have research expertise in one or more of the following areas: air pollution and control, physical chemical processes and engineered systems, pollution prevention

and industrial ecology, or natural waters and water quality modeling. Faculty responsibilities include effective classroom teaching at the undergraduate and graduate levels, developing curricula and laboratories, supervising M.S. and Ph.D. student research, publishing journal articles and developing and maintaining an externally funded research program. An earned Ph.D. in environmental engineering or related fields (other engineering disciplines or environmental science) is required. Excellent analytical laboratory facilities, computing resources, and interdisciplinary research opportunities are available through the Hazardous Substances Research Center, the Iowa Institute of Hydraulic Research, the Center for Health Effects of Environmental Contamination, the Center for Biocatalysis and Bioprocessing, and the Center for Global and Regional Environmental Research. Interested candidates should submit a letter expressing interest in the position, a current resume, and names, addresses, e-mail and phone numbers of at least three references to: Jerry Schnoor, Professor and Chair of the Search Committee, Dept. of Civil and Environmental Engineering, The University of Iowa, Iowa City, IA 52242. Applications will be reviewed beginning February 1, 1998, but applications will be accepted until the position is filled. Females and minorities under represented in the engineering profession are especially encouraged to apply. The University of Iowa is an Equal Opportunity/Affirmative Action Employer.

University of Alberta

Three new tenure-track positions at the Assistant Professor level (Associate Professor may be considered if a highly qualified candidate applies) in the Department of Civil and Environmental Engineering at the University of Alberta. The first two are in the Environmental Engineering Program (http://www.enveng.ualberta.ca) and are open to all applicants irrespective of nationality: 1) Numerical analysis and advanced mathematical modeling techniques in Environmental Engineering systems and processes; and 2) Environmental chemistry. Excellent candidates with interests in other areas of Environmental Engineering will be considered. The third position is in Geoenvironmental Engineering and is directed in the first instance to Canadian citizens. Full details can be found at http://www.aeep.org.

Please contact the Chair for further information:

Dr. T. M. Hrudey, Chair
Department of Civil & Environmental Engineering
University of Alberta
Edmonton, Alberta
T6G 2G7

Telephone: (403) 492-7620 Fax: (403) 492-0249

e-mail: TMHrudey@civil.ualberta.ca

University of Nevada

The Department of Civil and Environmental Engineering at the University of Nevada, Las Vegas, invites applications for a tenure-track position of Assistant Professor in hydrology/fluid mechanics/hydraulics. Responsibilities include development of funded research, undergraduate and graduate teaching, and service to the profession and the community. Applicants must have a B.S. degree in civil engineering and an earned Ph.D. in civil engineering or a closely related field with an emphasis in engineering hydrology. Experimentalist preferred. Experience with water quality issues desired. Only candidates who have successfully defended their Ph.D. dissertation will be considered. Professional engineering registration, or eligibility to take the P.E. exam is required. Salary is commensurate with experience. Appointment will begin Fall 1998. Review of applications will begin upon receipt. Applications will be accepted until the position is filled. Position is contingent upon funding. Applicants should subit a vitae and the names, addresses and telephone numbers of at least three references to: Edward S. Neumann, Chair, Dept. of Civil and Environmental Engineering, University of Nevada, Las Vegas, Box 45-4105, Las Vegas NV 89154-4015. For more information, see the UNLV WWW site at http://www.unlv.edu.

Equal opportunity/affirmative action employer. Minorities, women, veterans and the disabled are encouraged to apply.

Texas A&M University

FACULTY POSITION IN ENVIRONMENTAL ENGINEER-ING. The Department of Civil Engineering at Texas A&M University invites applications for a tenure track assistant professor position in the area of Environmental Engineering. The candidate is expected to establish and sustain an externally funded independent research program and publish in scholarly journals. In addition, the candidate should have a strong commitment to excellence in teaching at both the undergraduate and graduate levels. Complementing this, the candidate should be prepared to collaborate with colleagues to develop new research initiatives. Although applicants from all areas of environmental engineering will be considered, preference will be given to candidates with research/design experience in the areas of drinking water/wastewater engineering, solid waste engineering and air pollution. A bachelor's degree in civil engineering and an earned doctorate in civil engineering, environmental engineering, or a related field is required. Please submit a brief description of current research interests, a detailed resume and the names and addresses of three references to: Professor Roy Hann, Environmental, Ocean and Water Resources Division, Department of Civil Engineering, Texas A&M University, College Station, Texas 77843-3136. Screening of candidates will begin January 15, 1998 and continue until the position is filled. Additional information about the Department can be found at http://info-civil.tamu.edu/. Women and minorities are

especially encouraged to apply.

Texas A&M University is an Equal Opportunity and Affirmative Action

Employer.

University of Houston

Associate or Full Professor, Environmental Engineering-Air Quality, Cullen College of Engineering, University of Houston. The Department of Civil and Environmental Engineering at the University of Houston invites nominations and applications for an Associate or Full Professor position in the Environmental Engineering Program effective August, 1998. Nationally recognized candidates with a Ph.D. and a demonstrated record of teaching and research excellence are sought. Duties will include undergraduate and graduate teaching, and research related to air quality, air pollution control, modeling, monitoring, or dispersion. The successful candidate will play a major role in establishing and directing the new University of Houston Air Research Center, a key component of the Gulf Coast Air Research Cooperative, which is being formed in conjunction with the Gulf Coast Hazardous Substance Research Center. Applicants with an engineering degree and a P.E. license will be given preference. The UH Environmental Engineering Program comprises 5 core and 30 associated faculty, and 60 graduate students (50% full-time). With the recent addition of one million dollars of new analytical instrumentation, the Program's facilities remain among the best in the world. The University of Houston is a Research II institution with 31,000+ students located in America's fourth largest city. The intellectual, social, and artistic environment is outstanding. Unlimited potential exists in Houston for the successful candidate to take a leadership role in issues related to urban and industrial air quality. Applicants should send resumes along with names, addresses, and phone numbers of three appropriate references to:

Dr. Michael W. O'Neill

Moores' Professor and Search Committee Chair Department of Civil and Environmental Engineering 20 University of Houston

Houston, Texas 77204-4791

The University of Houston is an Equal Opportunity/Affirmative Action Employer. Minorities, women, veterans and persons with disabilities are encouraged to apply.

Georgia Institute of Technology

ENVIRONMENTAL ENGINEERING FACULTY POSITIONS IN 1) ENVIRONMENTAL BIOTECHNOLOGY, AND 2) ENVIRONMENTAL CHEMISTRY. The School of Civil & Environmental Engineering at the Georgia Institute of Technology invites applications for two (2) tenure-track positions. Positions are available in Environmental Biotechnology and Environmental Chemistry at the Assistant Professor level. Appointment at the Associate or Full Professor level will be considered depending on the candidate's experience and qualifications. Successful candidates will teach graduate and undergraduate courses and conduct research in the School's Environmental Engineering Program.

1) ENVIRONMENTAL BIOTECHNOLOGY. Applicants with specialization in one or more of the following areas are desired: Environmental microbiology and biotechnology; biochemistry and molecular biology of xenobiotic transformations;

microbial ecology. We are particularly interested in applicants with a science and/or engineering background and expertise in the development and use of modern techniques for identification and enumeration of specific microbial species, as well as delineation of community structure in both natural and engineered systems. The above areas reflect an interest in applicants who will complement the research activities of current faculty and expand the science base of the program. This position is interactive with bioscience initiatives being made in several campus colleges.

2) ENVIRONMENTAL CHEMISTRY. Applicants with expertise in one or more of the following areas are desired: Environmental chemistry; biochemistry; analytical chemistry; computational chemistry. We are particularly interested in applicants with a science and/or engineering background and expertise in the development and use of innovative techniques for studying the transformations of chemical contaminants in both natural and engineered systems, and have an in-depth knowledge of instrumental analysis.

Applicants for either position should possess an earned doctorate by the time of appointment and provide a clear demonstration of successful pursuit and conduct of independent research. Applicants for advanced-level appointments should document their current research and teaching activities. The positions are available as early as September 1, 1998. Evaluation of applications will begin in December 1997 and applications will be accepted until the positions are filled. Applicants should submit a curriculum vitae, a statement of teaching and research interests, and names, addresses and phone numbers of at least three references to: Dr. Michael D. Meyer, Professor and Chair, School of Civil & Environmental Engineering, Georgia Institute of Technology, Atlanta, Georgia 30332-0355. Inquiries regarding the EnvE program and specifics of the positions can be directed to Dr. A. Amirtharajah, EnvE Group Coordinator, at appiah.amirtharajah@ ce.gatech.edu or visit our web site at http://environmental.gatech.

The Georgia Institute of Technology is an Equal Education/Employment Opportunity Institution.

Clarkson University

FACULTY POSITION IN ENVIRONMENTAL ENGINEER-ING. The Department of Civil and Environmental Engineering at Clarkson University invites applications for a tenure-track position at the rank of Assistant Professor to begin August 1998. Duties of the position include teaching at the graduate and undergraduate level and continued active participation in research and cognate scholarly activities. The latter should focus on a specialty within the field of environmental engineering which compliments the department's current strengths in treatment processes, surface and subsurface water quality, and environmental chemistry. Such complementary areas as air quality and treatment, environmental systems engineering, global climate change, pollution prevention, or environmental risk assessment are especially appropriate. Eligibility for professional licensure may be considered during candidate selection. Clarkson University has recently identified several distinct, campus-wide research focus areas in which to concentrate resources for future growth, and applicants will be pleased to know that Environmental Quality is one of these research focus areas. Individuals with research interests and experience in areas that include air quality and treatment, environmental systems engineering, global climate change, pollution prevention, and environmental risk assessment are encouraged to apply. To be assured of full consideration, please submit materials as soon as possible. Send a current resume plus the names of at least three references to: Environmental Engineering Faculty Search Committee, Department of Civil and Environmental Engineering, William J. Rowley Laboratories, Clarkson University, Potsdam, NY 13699-5710. Please refer to Position Number 1-97 when inquiring about this position. Additional information is available through the World Wide Web at http://www.clarkson.edu/~cee.

Clarkson University is an Affirmative Action/Equal Opportunity Employer, and applications from women and other under-represented groups are especially encouraged.

University of California, Los Angeles

HYDROLOGY AND WATER RESOURCES. The Civil & Environmental Engineering Department at the University of California, Los Angeles (UCLA), invites applications for a tenuretrack or tenured faculty position in Hydrology and Water Resources. The position is for Fall 1998 at the rank of Assistant or Associate Professor. Preference will be given to applicants with demonstrated excellence in teaching, research, and professional service (Associate Professor level); however, outstanding junior applicants will also be seriously considered. Applicants must hold a Ph.D. degree in civil engineering (or equivalent). Preference will be given to applications who are either registered Professional Engineers, or who can become registered. The successful candidate will be expected to teach graduate and undergraduate courses in Hydrology and Water Resources. The candidate is also expected to develop and sustain an independent, extramurally-sponsored research program. The position requires expertise in one or more of the following areas: statistical hydrology, water resources systems analysis, modeling of surface and ground water, and hydroclimatology. Evaluation of applications will begin January 5, 1998, and will continue until the position is filled. Applicants should send a letter of application summarizing specific qualifications, a detailed resume, and a list of at least four references to: Professor William Yeh, Chair of the Search Committee, Civil & Environmental Engineering Department, 5732B Boelter Hall, University of California, Los Angeles, Los Angeles, CA 90095-1593; e-mail: Williamy@ seas.ucla.edu.

University of North Carolina

As part of a continuing commitment to advance underrepresented scholars in higher education, The University of North Carolina at Chapel Hill is pleased to announce the availability of at least five positions in the Carolina Minority Postdoctoral Scholars Program. Applications for study in any discipline represented at the University are welcome. The Department of Environmental Sciences and Engineering particularly encourages minority candidates to apply. The stipend will be \$34,000 per calendar year. Minority students who will have completed the doctoral degree no later than July 1, 1998 and no earlier than July 1, 1994 are eligible to apply. Preference will be given to U.S. citizens and permanent residents. This program is funded by the State of North Carolina and places emphasis on

African-Americans and Native Americans. Women are not considered to be minorities *per se*. A complete application will include a curriculum vitae, sample publications and/or dissertation chapters, a statement of research plans, and three letters of recommendation. All materials should be sent to the Carolina Minority Postdoctoral Scholars Program, Office of the Vice Provost for Graduate Studies and Research, CB #4000, South Building, The University of North Carolina at Chapel Hill, Chapel Hill, NC 27599-4000, and must be post-marked by February 1, 1998. Incomplete or late applications will not be accepted.

The Johns Hopkins University

POSTDOCTORAL FELLOW: CHEMICAL/ENVIRONMEN-TAL ENGINEERING. The Johns Hopkins University announces the availability of a two-year Camille & Henry Dreyfus Postdoctoral Fellowship in Environmental Chemistry (\$40,000 p.a.) in the area of molecular engineering of "greener" processes and products. Research will involve extensive collaboration between faculty within the Department of Chemical Engineering and the Department of Geography and Environmental Engineering at JHU. Applicants interested in an academic career in chemical engineering with a strong commitment to building a research program with an environmental perspective are encouraged to apply. For full consideration, please send resume and names of 3 references as soon as possible, to: Dr. Charles R. O'Melia, Department of Geography and Environmental Engineering, 313 Ames Hall, The Johns Hopkins University, 3400 N. Charles St., Baltimore, MD 21218-2686. Women and minorities are strongly encouraged to

JHU is an EEO/AA employer.

Drexel University

TWO FACULTY POSITIONS: 1) ENVIRONMENTAL PROCESS ENGINEERING, AND 2) ENVIRONMENTAL CHEMISTRY. Applications are invited for two faculty positions in the School of Environmental Science, Engineering and Policy at Drexel University. Applicants for both positions should have an earned doctorate, and have interests in and potential for develop-

ing a career balancing graduate and undergraduate teaching, research, and service. We particularly seek persons at the entry level, although applicants for all ranks will be considered. One position is available in April 1998, the second position is available in September 1998. Applicants for the environmental process engineering position should have a doctoral degree in environmental engineering, and should either have, or be eligible to obtain professional engineering licensure. Persons having other engineering doctoral degrees and extensive environmental engineering experience will also be considered. Research and teaching interests in physical-chemical treatment processes for environmental and public health protection are desired. For the environmental chemistry position, the individual should have a strong background in the chemical sciences applied to environmental problem solving. We anticipate that the successful candidate will have a doctoral degree in environmental chemistry. or in a closely related environmental science. Research and teaching interests in aquatic or atmospheric chemistry are desired. For both positions, preference will be given to candidates whose interests link with those of existing faculty, yet who show extensions beyond our current base of activitities. Both positions are housed in the newly created School of Environmental Science, Engineering and Policy (http://www.coas.drexel.edu/ environ/), which has 6 full-time faculty and 90 graduate students. An undergraduate program in environmental engineering has just begun to complement an existing undergraduate major in environmental science, and a planned educational program in environmental policy. Applications (indicating which position is being sought) should be submitted by mail, e-mail or fax to: Charles N. Haas, L. D. Betz Professor of Environmental Engineering, School of Environmental Science, Engineering and Policy, Drexel University, Philadelphia, PA 19104; e-mail: haascn@post.drexel.edu. Applications should include a statement of teaching interest, and a statement of research interest, in addition to a curriculum vitae. In addition, applicants should arrange for three letters of reference to be sent to Professor Haas. Review of applications will begin December 1, 1997. Applications will be accepted until the position is filled. Drexel University is an Equal Opportunity Employer.

Publications

REPORT AND PROPOSAL WRITING FOR ENVIRONMENTAL PROFESSIONALS:

A Self-Paced Training Program, by Janis Fisher Chan and Diane Lutovich

This new book is designed to help people who write, review, or edit environmental documents meet the challenge of communicating research findings and other important information clearly to a wide range of readers. It is a trade paperback, 130 pages, \$69 (shipping & handling: \$4.50). Discounts are available for purchases of multiple copies. For additional information, contact: ADVANCED COMMUNICATION DESIGNS, INC., P. O. Box 2504, San Anselmo, CA 94979; Phone: (415) 459-3563; Fax: (415) 459-8618; E-mail: adcom@linex.com.

New from Ann Arbor Press...

Chemistry of Drinking Water Treatment, Second Edition, by Samuel D. Faust and Osman M. Aly

Pesticides in the Atmosphere, edited by Michael S. Majewski and Paul D. Capel

Pesticides in Surface Waters, by Steven J. Larson, Paul D. Capel, and Michael S. Majewski

Pesticides in Ground Water: Distribution, Trends, and Governing Factors, edited by Jack E. Barbash and Elizabeth A. Resek

Practical Manual of Wastewater Chemistry, by Barbara Hauser

Advances in Modeling the Management of Stormwater Impacts: Volume 5, edited by William James

Watershed Hydrology, Second Edition, by Peter E. Black

Proceedings of the 51st Purdue Industrial Waste Conference (1996), edited by Ronald F. Wukasch and Cynthia S. Dalton

Proceedings of the 50th Purdue Industrial Waste Conference, edited by Ronald F. Wukasch and Cynthia S. Dalton

EPA Environmental Assessment Sourcebook, edited by J. Russell Boulding

EPA Environmental Engineering Sourcebook, edited by J. Russell Boulding

Chlorine and Chlorine Compounds in the Paper Industry, edited by Victor Turoski

Metals in Surface Waters, edited by Herbert E. Allen, A. Wayne Garrison, and George W. Luther III

Metal Contaminated Aquatic Sediments, edited Herbert E. Allen

Subsurface Restoration, edited by C.H. Ward, John A. Cherry, and Marion R. Scalf

For more information or to order any of the books listed, call 1-800-858-5299.

Book Reviews

GREEN TECHNOLOGY AND DESIGN FOR THE ENVIRONMENT, by Samir B. Billatos and Nadiaf A. Basaly, Taylor & Francis, Washington D.C., 1997

In the late 1970s, I wrote a book review for a book on how cars can be designed to improve the extraction and reuse of various parts. The book was written by Michael Henstock of the University of Nottingham. It was a good book and I gave it a favorable review, but then I said something like "This will never happen. The idea that car manufacturers will be designing car parts for ease of removal and reuse is ridiculous. Nice book but dumb idea."

How the world has changed in 20 years! German manufacturer BMW, for example, is paying good money for old BMW hulks, and hopes to increase the percentage of recycled car weight from the present 75% to over 90%. The Opel car now has easy to assemble and disassemble bumpers, and old polypropylene battery casings are used for fender liners. In the not-too-distant-future, we can expect most of our cars to be made of previously used parts or materials.

Under the flag of "green engineering" or "environmentally conscious manufacturing" of "green technology", manufacturers worldwide are designing products that use less raw material, are easier to recycle, cause less pollution, and last longer in use. These concepts are important and should be introduced into environmental engineering education programs. The book by Billatos and Basaly is a good first step toward that end.

The book is designed for both the working engineer as well as for the student. The first part of the book contains chapters on infrastructure, regulations and the waste stream; new theories for environmental regulation; design for the environment; recycling issues; and plastics for environmentally conscious engineering.

The second part of the book consists of design examples, and has chapters on design for assembly and disassembly, design for environmentally friendly vehicles, design for manufacturing process improvement, design for quality applications in machining, life-cycle analysis; and multiattribute utility analysis of municipal recycling.

One of the positive features of this book is the problems at the end of the chapters. They are thought problems, requiring students to do more than plug-and-chug. The writing is fluid and easy to read and the book is full of real-world examples of waste minimization efforts by corporations, better designs that allow for disassembly, management of toxic materials and changes in manufacturing operations to reduce pollution. These examples by themselves make the book worthwhile to have on your shelf.

But the book also has problems. Let me begin with the trivial.

The authors are enamored with acronyms. At the back of the book are almost five pages (!) of definitions used in the book. Let me exaggerate a bit by quoting inaccurately:

"While the design for manufacture and assembly (DFMA), concurrent engineering (CE), and design for disassembly (DFD) also capture their share of headlines (SOH), with DFD come the promise of reversing decades of neglect (RDON) regarding the environmental responsibility (ER) of designers and manufacturers (D&M)."

A second criticism is more substantive. The book lacks meat -- the kind of meat we all expect in a textbook and the kind of meat we need for preparing presentations for the classroom. The last chapter comes the closest to presenting a usable technique for engineers to use, but backs off by not presenting examples or homework problems. Because of this, the book would be very hard to use as the single text in a "green engineering" course.

Finally, the authors (both of whom appear to be mechanical engineers) desperately need an environmental engineering coauthor or at the very least a vigorous review by someone who understands the solid waste and wastewater treatment field. The book is riddled with mistakes, some of which are trivial, but others are serious. Perhaps the most serious mistake is the confusion over the meaning of "reuse", "recycle" and "recover". The terms are, of course, very different and represent different means of using materials a second time, but the authors seem to not appreciate this difference, causing some of their discussions to be muddled or misleading.

When they talk about wastewater treatment, their lack of background is painfully evident. Quoting from the book:

"Trickling filters and activated sludge treatment reduce biological oxygen, and nitrogen can be removed by identification [sic] processes."

Or:

"In today's recycling industry, the most common form of sep-

aration is shredding."

Or:

"[The success of aluminum recycling] can be attributed to the 5-cent payback that the consumer receives in many states for each can that they return to be recycled."

If my students had written any of these statements I would have been rightly upset. I wish the authors of the book had consulted with environmental engineers familiar with the waste treatment field before publishing their book.

But I may be overly harsh. "Green Technology" is a good, first effort. If you want to include some of these ideas in your environmental engineering course, get this book and use the hundreds of good examples to spice up your presentations.

And yes, I now publicly apologize for my negative review of automobile recycling 20 years ago. Michael Henstock had the right vision; I did not. Nice idea but dumb review.

P. Aarne Vesilind

Conferences/Calls for Papers

Special Water Treatment Symposium March 22-25, 1998

Virginia Tech's Environmental Engineering Program, Division of Continuing Education and Center for Organizational and Technological Advancement, and Oliver, Inc. are sponsoring a symposium entitled, "Water Treatment, The Views of Several Experts," in March 1998. The three-day symposium covering the latest information about water treatment will be held at Virginia Tech's Hotel Roanoke and Conference Center in Roanoke, Virginia. Among the featured speakers are Robert Hoehn, Charles O'Melia, John Cleasby, Bruce Rittmann, Marc Edwards, Allen Hammer, John Little, Mark Sobsey, Joseph Jacangelo, Francis DiGiano, Philip Singer, William Knocke, and James Edzwald. For more information, please contact Gregory Boardman, (540) 231-6020, gboard@vt.edu; or Jack Lilly, (540) 231-4849, jacklily@vt.edu, or visit the web site http://www.conted.vt.edu/calendar%7Efall/upcoming_conferences.html. Exhibitors are welcome.

Degradation Processes in the Environment Dubrovnik, Croatia May 24-28, 1998

An IUPAC Conference entitled "Degradation Processes in the Environment," will take place in Dubrovnik, Croatia, May 24-28, 1998. More information on the conference as well as registration materials can be obtained at URL http://faust.irb.hr/~sabljic/ or by writing A. Sabljic, Rugjer Boskovic Institute, P.O. Box 1016, HR-10001, Zagreb, Croatia (sabljic@olimp.irb.hr). In addition, if you have questions on traveling in Croatia, contact Jim Mihelcic, Michigan Technological University (jm41@mtu.edu) who recently visited Croatia and plans on attending the conference. The primary objective of this conference is to present and evaluate: i) methods for measuring environment degradation processes, (ii)

the availability, quality and usefulness of environmental degradation data, and (iii) qualitative and quantitative modeling of environmental degradation processes in air, water and soil. The conference will take place in the stunning Renaissance city of Dubrovnik, which sits on the Mediterranean and is protected as a UN world cultural heritage city. More information on Dubrovnik can be found at http://tjev.tel.fer.hr/dubrovnik. The conference is being organized by the Rugjer Boskovic Institute, Zagreb, Croatia, and the International Advisory Committee consists of R.A. Cox, UK; J.T. Herron, USA; W. Karcher, Italy; L. Klasinc, Croatia; Klein, Germany; H.P. van Leeuwen, The Netherlands; J. Miyamoto, Japan; W.J.G.M. Peijnenburg, The Netherlands; K.D. Racke, USA; A. Sabljic, Croatia; Shevah, Israel; J. Slanina, The Netherlands; J. Troe, Germany; P. Warneck, Germany. The conference topics are:

- Atmospheric Degradation Processes, Gas Phase Reactions with Radicals, Phototransformations in Gas Phase Processes in Clouds, Fog, Rain & Sea Spray Processes on Particles & Aerosols
- Degradation Processes in Water & Soil Oxidation and Photo-oxidation in Water Anoxic Degradation Processes, Heterogeneous Processes, Biodegradation Processes, Effect of Soil on (Bio)Degradation
- Degradation Data: Sources & Quality
- Modelling Degradation Processes, QSAR Multivariate Methods, Quantum Mechanics & Dynamics
- Application of Research Results in Environmental Management

The tentative list of plenary and invited speakers is: P.J. Crutzen, Mainz; W. Kroto, Brighton; R.. Ahlrichs, Karlsruhe; R Atkinson, Riverside; T.H. Christensen, Lyngby; J. Damborsky, Brno; A.I. Flossmann, Clermont-Ferrand; C.P.L. Grady, Jr., Clemson; G. Klopman, Cleveland; U. Schurath, Karlsruhe; J.D. Walker, Washington, D.C.; James R. Mihelcic, Ph.D., Associate Professor, Civil & Environmental Engineering, Michigan Tech-

nological University, Houghton, MI 49931; phone: (906) 487-2324; fax: (906) 487-3292.

Special Session Announcement and Call for Abstracts Sorption of Organic Pollutants to Soil,

Sediment, and other Geologic Solids
American Geophysical Union Meeting
Boston, Massachusetts
May 26-29, 1998

Sorption to soil, sediment, and other geologic solids is an important process that affects the fate, transport, and remediation of organic pollutants and pesticides in aquatic systems. This session seeks to bring together recent research on a variety of environmental science and engineering topics related to sorption processes, including the sorption of organic pollutants by soil or sediment from different media (e.g. water, air, organic liquids), sorption and desorption rate phenomena, the effects of chemical and physical heterogenities on sorption processes, the effects of surface-active agents on organic compound sorption, and the effects of rate-limited sorption on other fate processes, including biodegradation and chemical reaction. We particularly encourage submissions of fundamental research aimed at providing a better mechanistic understanding of the sorption process. Submissions describing either experimental data or model interpretations are welcome; however, studies which include both aspects re especially encouraged. Submit abstracts to both AGU and one of the session conveners. Abstracts can be submitted to AGU via electronic mail or regular mail (deadline February 19, 1998) or by the AGU interactive web form (deadline February 26, 1998). Electronic and conventional abstract submission instructions will be posted in EOS and on the AGU web site (http://www.agu.org). Conveners: William P. Ball, Department of Geography and Environmental Engineering, 313 Ames Hall, The Johns Hopkins University, 3400 North Charles Street, Baltimore, MD 21218-2686; phone: (410) 516-5434; fax: (410) 516-8996; e-mail: bball@ jhu.edu. Additional information on this special session can be found at http://www.cs.virginia.edu/~civil/AGU.session.html.

AWRA and SRM Specialty Conference on Rangeland Management and Water Resources Reno, Nevada May 27-30, 1998

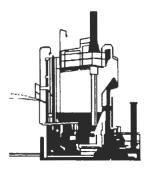
A National Specialty Conference on Rangeland Management and Water Resources will be held May 27-30, 1998, in Reno, Nevada, sponsored by the American Water Resources Association and the Society for Range Management. The conference will be an interdisciplinary forum to exchange ideas about how to better understand and respond to conditions and trends related to water in grassland ecosystems and those communities and economies relying on that water. The conference will address the full range of legal, social, economic, physical, chemical, biological, and eco-

logical issues related to the amount, distribution, quality, timing, and use of rangeland water resources. As a secondary effort, conference attendees will consider how current legal frameworks in combination with research-generated technology can be used to manage and protect water resources in arid and semi-arid rangeland regions. Both surface and groundwater resources will be considered. The conference program will feature concurrent technical sessions on this wide variety of topics, as well as a number of organized panel discussions, poster sessions, and technical field trips.

For more information, contact the American Water Resources Association, 950 Herndon Pkwy., Suite 300, Herndon, VA 20170-5531, phone (703) 904-1225, fax (703) 904-1228.

Call for Papers 72nd Colloid & Surface Science Symposium Pennsylvania State University June 21-24, 1998

The 72nd CSSS will be held June 21-24 at Penn State University, University Park. there will be a Technical Symposium entitled "Colloids in Separations and Environmental Technologies" with Drs. Osseo-Asare and Chander organizers. Sessions dealing with "Environmental Aspects of Colloid and Surface Science" will be organized within the mentioned Technical Symposium. AEEP members are particularly invited to submit papers for the Environmental Aspects sessions. The advertised deadline for abstract submission is January 15th, but this will be extended until February 1st due to the lateness of this advertisement. Camera-ready abstracts (150 words maximum) for the Environmental Aspects sessions should be sent to Brian Dempsey (212 Sackett Building, University Park PA 16802). A web site for the 72nd Colloid & Surface Science Symposium has been set up at the address: http://gibbs.che.psu.edu/acs. You can access and download ACS abstract forms by linking to ACS from this web site. For further information, please contact Brian Dempsey at bad5@psu.edu or at 814 865-1226.



Call for Papers
30th Mid-Atlantic
Industrial and
Hazardous Waste
Conference
Philadelphia,
Pennsylvania

July 12-15, 1998

The Mid-Atlantic Industrial and Hazardous Waste Conference is an annual meeting of environmental engineers from consulting; manufacturing; federal, state, and local government agencies; utilities; and universities. The meeting is sponsored by a consortium of Middle Atlantic universities and consists of oral presentations, poster presentations, exhibits, and published pro-

ceedings.

Interested authors should submit three copies of the paper abstract to Rominder P.S. Suri, Department of Civil and Environmental Engineering, Villanova University, 800 Lancaster Avenue, Villanova, PA 19085-1681. Abstracts should be 200-300 words, single-spaced. Below the title, provide the name(s), organization, address, telephone and fax numbers, and e-mail address of the author(s), and indicate whether the abstract is intended for oral or poster presentation. Please identify the speaker and the corresponding author. Abstracts should be received by February 1, 1998. Instructions for authors will be posted by the end of February 1998. For more information on the conference, please view the conference web page (http://www.vill.edu/~engine/cee/news/wasteconf) or contact G. Lee Christensen, phone (610) 519-4957; fax (610) 519-6754; or e-mail lchriste@email.vill.edu.

1998 Symposium on Environmental Models & Experiments Envisioning Tomorrow (EnviroMEET '98) Behavior and Remediation of Nonaqueous Phase Contaminants in the Subsurface Irvine, California July 20-23, 1998

Sponsored by the Department of Civil and Environmental Engineering at the University of California, Irvine, and the Department of Civil and Environmental Engineering at the University of California, Los Angeles, the purpose of EnviroMEET '98 is to explore recent fundamental and practical advancements addressing problems related to nonaqueous phase organic contaminants in the subsurface. The symposium will raise fundamental issues which should be of interest to environmental theoreticians, experimentalists and practitioners interested in knowing our present state of understanding and future research needs related to this important topic. Presentations related to laboratory or field experiments or computational work in any of the following topics are welcome:

- Dissolution equilibria and rates for nonaqueous phase liquids
- ♦ Modeling LNAPL and DNAPL transport in the subsurface
- Nonaqueous phase liquid transport, entrapment and mobilization
- Behavior of cosolvents, surfactants and colloidal particles in mobilizing residual nonaqueous phase liquids
- Geophysical and other techniques for locating nonaqueous phase liquids
- Behavior of nonaqueous phase liquids in fractured media
- Remediation techniques for NAPL contamination
- Case Studies

Submissions on other issues related to NAPL transport and transformations will also be considered. Paper selection and arrangement will be orchestrated by the scientific committee with the intent of maximizing the potential for communication among experimental modelers, as well as between modelers and practitioners.

Organizing Committee

Prof. Jacob Bear, Department of Civil Engineering, Technion Institute of Technology, Israel; e-mail: cvrbear@turbo.technion. ac.il; Prof. Constantinos V. Chrysikopoulos, Department of Civil and Environmental Engineering, University of California, Irvine, USA; phone: (714) 824-8661; fax: (714) 824-3672; e-mail: costas@eng.uci.edu; and Prof. Thomas C. Harmon, Department of Civil and Environmental Engineering, University of California, Los Angeles, USA, phone: (310) 206-3735; fax: (310) 206-2222; e-mail: tch@seas.ucla.edu.

The symposium will consist of single-session, oral presentations of accepted papers, as well as featured and invited lectures by distinguished researchers. Poster presentations will be included in dedicated sessions. Symposium details and a preliminary program will be published in a second brochure. For the latest information about EnviroMEET '98, bookmark the symposium web site at www.eng.uci.edu/~costas/E98.html.

8th International Gothenburg Symposium on Chemical Treatment Prague, Czech Republic September 7-9, 1998

The biennial Gothenburg Symposia are recognized as unique meeting places for administrators, engineers, and scientists active in the treatment of drinking water, municipal and industrial wastewater, and sludges.

The series of conferences started with a long needed survey of theory and practice in all areas of chemical water and wastewater treatment (Gothenburg 1984—from where the symposia derived their name). These conferences have proven to be among the most important meetings for people who are engaged in the protection of our water resources. The 8th Symposium again invites scientists, process engineers, administrators and operators from the fields of water and wastewater treatment to submit papers and attend presentations concerned with all aspects of chemical treatment. Particular topics of interest include the following:

- Particle Destabilization/Floc Formation
- Floc Separation
- ♦ Chemicals for Flocculation/Precipitation
- Chemicals for Oxidation and Disinfection
- Automation and control
- Sludge Handling
- Combined Process Design and Operation
- Resources reuse; Energy, Chemicals, Solids, Water

Conference cosponsors are Chalmers University of Technology, Gothenburg, Sweden; Kemira Kemi AB, Kemwater, Helsingborg, Sweden; Norwegian University of Sciences and Technology (NTNU), Trondheim, Norway; and University Fridericiana, Karlsruhe, Germany. The symposium will be held at the Ambassador Hotel, Prague, Czech Republic. Registration deadline is August 15, 1998. To preregister, write to 8th International Gothenburg Symposium on Chemical Treatment, c/o Kemira Kemi AB, Mrs. Agneta Lindquist, P.O. Box 902, SE-251 09 Helsingborg, SWEDEN.

Call for Papers

New International Journal on Environmental Engineering and Policy January 1998

A new international journal on environmental engineering and policy starting in January 1998, *Environmental Engineering and Policy: an International Journal for Environmental Engineers, Scientists and Policy Makers* offers a unique opportunity to publish in a scholarly journal with international impact.

Aims and Scope

Many environmental problems arise in complex scientific, technical, economic and public policy contexts. Consequently, solutions require integration of these contexts. *Environmental Engineering and Policy* will cover scientific research, discoveries and innovations related to complex environmental engineering and related policy issues in the following fields:

- · Wastewater collection and treatment
- · Water resources and treatment
- · Air pollution control technologies
- · Hazardous toxic waste management
- · Fate and transport of contaminants in the environment
- · Environmental regulations and compliance
- · Pollution prevention
- · Solid waste management
- · Conservation and environmental protection

Editorial Board

Takashi Asano, University of California at Davis, Davis, CA, USA

Yves Aurelle, Institut National des Sciences Appliquees (INSA), Toulouse, FRANCE

Peter Baccini, Swiss Federal Institute of Technology Zurich, Zurich, SWITZERLAND

Jonathan Deason, George Washington University, Washington, DC, USA

Jack Ditmars, National Laboratory, Argonne, IL, USA Odelia Funke, U.S. Environmental Protection Agency, Washington, DC, USA

Carlos Garcia, Los Alamos National Laboratory, Los Alamos, NM, USA

Sukehiro Gotoh, National Institute for Environmental Studies, Ibaraki, JAPAN

Hermann Hahn, Universitat Karlsruhe, Karlsruhe, GER-MANY

James P. Heaney, University of Colorado, Boulder, CO, USA J. Charles Jennett, Texas A&M International University, Laredo, TX, USA

Joel Mallevialle, Aguas Argentinas S.A., Buenos Aires, AR-GENTINA

David Marks, Massachusetts Institute of Technology, Cambridge, MA, USA

R. Jerry Murphy, University of South Florida, Tampa, FL, USA

Junko Nakanishi, Yokohama National University, Yokohama, JAPAN

Michel Roustan, Institut National des Sciences Appliquees (INSA) Toulouse, FRANCE

Dave Rubenson, RAND, Santa Monica, CA, USA

W.H. Rulkens, Wageningen Agricultural University, Wageningen, THE NETHERLANDS

Stephen P. Shelton, University of New Mexico, Albuquerque, NM, USA

Edgar D. Smith, USACERL-ULI, Champaign, IL, USA Lawrence Susskind, Massachusetts Institute of Technology, Cambridge, MA, USA

Prakash Temkar, Army Environmental Policy Institute, Atlanta, GA, USA

Lloyd V. Urban, Texas Tech University, Lubbock, TX, USA

P. Aarne Vesilind, Duke University, Durham, NC, USA Ben Yen, University of Illinois, Urbana, IL, USA

Editor

Professor Ravi Jain
College of Engineering
701 Engineering Research Center - ML 0018
University of Cincinnati
P.O. Box 210018
Cincinnati, OH 45221-0018

phone: (513) 556-5438 fax: (513) 556-4003 e-mail: ravi.jain@uc.edu

Publisher

Springer-Verlag Engineering Editorial Tiergartenstrasse 17 D-69121 Heidelberg GERMANY

phone: ++49 (6221) 487-480 fax: ++49 (6221) 487-150 e-mail: raufelder@springer.de

For further information about submitting papers and Instructions for Authors:

- · Please see the web site, http://link.springer.de, or
- · Contact the Editor or Assistant Editor at ravi.jain@uc.edu, (513) 556-5438, or sbill@uceng.uc.edu, (513) 556-1166.



Tell your students... the new and improved AEEP student web page is here!



18

The Student Organizations Committee announces a new and improved AEEP web page specifically designed for students. The URL is http://bigmac.civil.mtu.edu/aeep/student.html. Please forward this information to your undergraduate and graduate students who have an interest in environmental engineering. The Committee's goal is to establish, promote, and assist student organizations interested in environmental engineering and science. The web page currently provides links to various student group web pages, graduate school information, existing national professional groups, student competitions, and some employment opportunities. Students or faculty advisors should contact Jim Mihelcic (jm41@mtu.edu) if they wish for their student group web page to be linked or have other items to place on this page. A copy of the Committee's 1996 report which surveyed the AEEP membership's interest in forming a new professional group for students can be found at http://bigmac.civil.mtu.edu/aeep/committee.html. For the first time, students now have the opportunity to provide the Committee with their comments on the formation of a new professional society specifically geared for environmental engineering students. Students can provide input by submitting an electronic student survey or by posting their comments for "all to see" in the AEEP "Student Lounge." The AEEP Students Organizations Committee is Jim Mihelcic (chair), Michigan Tech; Allen Davis, University of Maryland; John Little, Virginia Tech; Sarah Liehr, North Carolina State; and, Joel Burken, University of Missouri-Rolla. Any AEEP member interested in joining the Committee should contact Jim Mihelcic, Associate Professor, Civil & Environmental Engineering, Michigan Technological University, Houghton, MI 49931; phone (906) 487-2324; fax (906) 487-3292. The student union web page is maintained by several student members of Michigan Tech's Society for Environmental Engineering (SEEn).

1997 "Endnotes" for the New Year

These headlines, which appeared in various papers in 1996, were rated by the Wall Street Journal staff to be the most entertaining:

British Left Waffles on Falkland Islands

Red Tape Holds Up New Bridges
Typhoon Rips Through Cemetery; Hundreds Dead
Man Struck by Lightning Faces Battery Charge
Include Your Children When Baking Cookies
Drunk Gets Nine Months in Violin Case
Clinton Wins on Budget; But More Lies Ahead
Enraged Cow Injures Farmer With Ax
Juvenile Court to Try Shooting Defendant
Two Sisters Reunite After 18 Years in Checkout Counter
Enfields Couple Slain; Police Suspect Homicide
New Study of Obesity Looks for Larger Test Group
Kids Make Nutritious Snacks

APPLICATION FOR MEMBERSHIP

in the

Association of Environmental Engineering Professors

Name:					
	nt:				
Business A	Address:				
Business	s phone:				
Home Add	dress:				
Home pl	none:				
E-mail:		· · · · · · · · · · · · · · · · · · ·	Fax:		_
Applying f	For: Regular M Affiliate M		Rank:		
	Student M		Advisor		
			Advisor		
	Sustaining	Member			
	PLEASE ATTAC	H A BRIEF (1-	3 page) CURRI	CULUM VITAE	
current year. You wi will be credited to the	ayable to the Association of the last receive that year's AEEP of following year. After join the last of the last receive the	Directory and back ning, you will recei	c issues of the <i>News</i> ve a copy of the <i>Ne</i>	letter. New member of wsletter and a current	lues paid after October 1
	RANK/STATUS:			ANNUAL DUES:	
	Regular Member (Profe	essor)		\$65.00	
	Regular Member (Asso			\$50.00	
	Regular Member (Assis	stant Professor)		\$30.00	
	Affiliate Member			\$40.00	
	Student Member Sustaining Member			\$15.00 \$250.00	
	Sustaining Wellioei			\$250.00	
	Please return this for			ectory Data form to:	
	D	Jerry Sc			
	Departi	ment of Civil and En University		eering	
		202 Iowa Advanced Iowa City,	d Technology Lab		
Enclosed are my AEI	EP dues in the amount of: \	J.S. \$			
		Signature		Date	

OFFICERS

President:

Bruce E. Logan Civil and Environmental Engineering Pennsylvania State Univ. 212 Sackett Building University Park, PA 16802 Tel: (814) 863-7908 Fax: (814) 863-7304

E-mail: blogan@psu.edu

Vice-President:

Kimberly A. Gray Department of Civil Engineering Northwestern University 2145 Sheridan Road Evanston, IL 60208-3109 Tel: (847) 467-4252 Fax: (847) 491-4011

E-mail: k-gray@nwu.edu

Secretary:

Jerald L. Schnoor Department of Civil & Environmental Engineering University of Iowa 202 Iowa Advanced Tech. Lab Iowa City, IA 52242 Tel: (319) 335-5649 Fax: (319) 335-558

E-mail: ischnoor@cgrer.uiowa.edu

Treasurer:

David A. Dzombak Civil and Environmental Engineering Carnegie Mellon Univ. Pittsburgh, PA 15213-3890 Tel: (412) 268-2946 Fax: (412) 268-7813

E-mail: dzombak@ce.cmu.edu

Past President:

James C. Young Department of Civil Engineering University of Arkansas 4190 Bell Engineering Center Favetteville, AR 72701 Tel: (501) 575-3034 Fax: (501) 575-7168

E-mail: jcyuark@aol.com

DIRECTORS

Jim Alleman (1995-98) Purdue University

Robin Autenrieth (1997-2000) Texas A&M University

David Dzombak (1996-99) Carnegie Mellon University

Kimberly Gray (1996-99) Northwestern University

Bruce Logan (1995-98) University of Arizona

Kurt Paterson (1997-2000) Michigan Tech University

Debra Reinhart (1997-2000) University of Central Florida

Chet Rock (1995-98) University of Maine

Jerry Schnoor (1996-99) University of Iowa

Joanne Fetzner **AEEP Business Office** 2208 Harrington Court Champaign, IL 61821 (217) 398-6969, Fax (217) 333-9576 jfetzner@s.psych.uiuc.edu

SUSTAINING MEMBERS

Amoco Oil Company Colin G. Grieves Naperville, IL

John Carollo Engineers Walter A. Bishop, Jr. Walnut Creek, CA

Ann Arbor Press, Inc. Robert DeWall, Jr. Chelsea, MI

CH2M Hill Brooks W. Newbry Denver, CO

Pasadena, CA

Parsons Engineering Science, Inc. Nicholas L. Presecan

Black and Veatch Bruce W. Long Kansas City, MO

Eastman Kodak Co. Richard A. Poduska Rochester, NY

The Proctor & Gamble Co. Dr. Drew C. McAvov Cincinnati, OH

Camp, Dresser & McKee Richard Orton Cambridge, MA

Montgomery Watson, Inc. Rudy J. Tekippe Pasadena, CA

REACT Environmental Engineers George M. Barson St. Louis, MO

John Wiley & Sons, Inc. Wayne Anderson New York NY

McGraw-Hill B.J. Clark, Engineering New York, NY



Association of Environmental Engineering Professors NEWSLETTER

BULK RATE U.S. POSTAGE PAID CHAMPAIGN, IL PERMIT NO. 75

Roger L. Ely, Editor AEEP Newsletter University of Idaho Department of Civil Engineering Moscow, ID 83844-1022