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**April** 1996

## PRESIDENT'S LETTER

Even though this is the April issue of the Newsletter, this is my first communication to the membership since my installation as President in October. Most of you know that this is because I suffered a mild heart attack the day before Thanksgiving (which gave me the privilege of spending Thanksgiving day in the hospital on a very restricted diet). Even though my recovery since then has gone very well, the event and subsequent weather piled up the work and put me way behind schedule. When you've had a heart attack no one (say 'wife') will let you shovel snow, so after the 34 inch snowfall in early January I was unable to get my car out of the driveway for 4.5 days, when help finally arrived. Then we got another five inches two days later, and eighteen inches three weeks after that. It's been that kind of winter.

I want to thank those who have stepped forward to pick up the slack during these days. I especially want to thank Past President Steve Randtke who has answered e-mails, written letters, sent reminders and provided encouragement. I also want to give special thanks to Treasurer Jim Alleman. (I noticed he was not listed as Treasurer in the January issue of the Newsletter, but he has the job and is doing it very competently.)

Looking ahead to events and challenges for the association, I want to remind readers of the importance of the Environmental Engineering Education and Practice Conference, which will be held in Orono, Maine, August 3-6 of this year. I believe there are several challenges which face our association and our profession at the present time. In the form of questions, the challenges I perceive are: How will our educational institutions respond to the broadening of environmental engineering that has occurred within recent years, i.e., from primarily water and air programs to those that include major components of industrial hygiene, soil remediation, management of radioactive and/or toxic wastes, pollution prevention and/or ecosystem engineering? Should all of our traditionally graduate level

programs also develop undergraduate curricula? What should we be teaching at the undergraduate and graduate levels? How big is the market for BS, MS and PhD graduates? How important is the interface between academicians and practitioners? How can we improve interactions and crossfertilization between academicians and practitioners? How much influence should academicians have on the ABET accreditation process of academic programs and on the licensing procedures for practicing engineers? How much influence should practitioners have on academic curricula and course contents? Should licensing of environmental engineering faculty be mandatory?

Many of these issues will be discussed and debated at the Education and Practice Conference. The profession needs as many of you as possible to attend and contribute to the deliberations. Please make a special effort to be there!

During January the Executive Committee of the AEEP Board met with the Executive Committee of the American Academy of Environmental Engineers (AAEE), as we did last year, in an effort to improve communications and interactions between the two organizations. Of course, we are jointly sponsoring the Education Conference this August, and this has resulted in increased interactions. The presence of practitioners at the Conference should significantly enrich the program and the deliberations. Note also that any AEEP member that requests it can now receive, free of charge, a subscription to Environmental Engineer, the magazine published by AAEE. The response to this offer, thus far, has been very good. I encourage you to request your subscription if you have not already done so. Simply notify Joanne Fetzner at the AEEP Business Office using the address given on the last page of this newsletter.

Clifford W. Randall

## **AEEP News and Announcements**

## 1996 Montgomery Watson Master's Thesis Awards

Entries are sought for the 1996 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 advisor. The cash 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 Spyros G. Pavlostathis, School of Civil and Environmental Engineering, Georgia Institute of Technology, Atlanta, GA 30332-0512. 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 inexpensive xerographic copies are recommended. The deadline for submission is April 30, 1996 for dissertations completed during the 1995 calendar year. Faculty advisors are urged to limit themselves to a single entry (which will be considered for each of the 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 1<sup>st</sup> so that the recipients and their advisor can be invited to the AEEP luncheon at the WEF meeting.

## **Revised Bylaws**

A current copy of the AEEP Bylaws, including the September 1995 revisions, can be obtained from Joanne Fetzner upon request. A copy will also be posted on AEEP's home page on the Web.

In voting on the proposed changes last year, several members expressed concern regarding the deletion of certain committees for the Bylaws. In some cases, the Board's intent may not have been clear. The intent was to retain in the Bylaws specific mention of only those committees necessary for the governance of the organization (e.g. the nominating and audit committees). The Board retains the general authority to appoint committees as needed, and the committees that are no longer mentioned by name in the Bylaws still exist or have had their functions incorporated into other committees. The deletion of these committees from the Bylaws was by no means meant to reflect their importance to AEEP.

## 1996 AEEP Outstanding Doctoral Thesis Awards

Entries are sought for the 1996 Outstanding Doctoral Thesis Awards, one sponsored by Engineering Science, Inc., and the other by CH2M-Hill. Two separate but equivalent 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 thesis to Michael D. Aitken, Department of Environmental Science and Engineering, CB-7400, University of North Carolina, Chapel Hill, NC 27599-7400. The theses 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.

The deadline for submission is April 30, 1996 for dissertations completed during the 1995 calendar year. Faculty advisors are urged to limit themselves to a single entry (which will be considered for each of the 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; orginality 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 1<sup>rt</sup> so that the recipients and their advisor can be invited to the AEEP luncheon at the WEF meeting.

### Ann Arbor Press, Inc.

Ann Arbor Press is offering AEEP members a 50% discount off the price of the 50<sup>th</sup> Edition of the Purdue Industrial Waste Conference – list price is \$89.95. If you mention this AEEP Newsletter announcement, the price is \$45 (plus shipping — \$3.50 in US and Canada/\$10 everywhere else). You can also set up a standing order for future volumes of the proceedings at a 20% discounted prices of \$71.96.

Ann Arbor Press, Inc. 121 South Main Street P.O.Box310 Chelsea, Michigan 48118 313/475-8787 or Fax 313/475-8852

AEEP members were sadden to learn of the death of **Dr. Michael D. LaGrega**, Professor of Environmental Engineering, Bucknell University. He passed away on Friday, December 8, 1995. Michael D. LaGrega received a bachelor's degree in Civil Engineering from Manhattan College and a master's degree and Ph.D. in Environmental Engineering from Syracuse University. Dr. LaGrega was a licensed professional engineer in six states and board-certified in the specialty of hazardous waste management by the American Academy of Environmental Engineers. Dr. LaGrega was a principal of the firm of Environmental Resources Management, Inc. His most recent accomplishment was the publication of the book entitled *Hazardous Waste Management* published by McGraw-Hill, Inc. in 1994. It is a monumental book with 1200 pages, along with a 600-page solutions manual. Many environmental programs have already adopted this book. Born on July 19, 1944, he was 51 years old. He is survived by his wife, Mary, of 25 years in addition to two children at home - David and Diane. In honor of Dr. LeGrega, contributions may be made to Bucknell University Civil Engineering Department for the support of students.

## CONFERENCES/CALL FOR PAPERS

## 3<sup>rd</sup> International Slow Sand/ Alternative Biological Filtration Conference

Imperial College - London, UK April 22-25, 1996

Biofiltration is expected to become more common over the next decade as efforts to decrease disinfection by-products in drinking water and microbial regrowth in distribution systems are emphasized. The objective of this conference is to provide a physical, chemical and biological perspective on factors affecting the performance of biological filtration processes from slow sand filtration to alternative biological treatment techniques such as biological activated carbon (BAC). For registration details contact: M.R. Collins, University of New Hampshire, Department of Civil Engineering, Environmental Research Group, Durham, NH 03825, 603/862-1407 or fax 603/862-2364.

## Virginia Polytechnic Institute and State University and Olver, Inc. Presents A Symposia on Wastewater Treatment

Hotel Roanoke and Conference Center Blacksburg, Virginia September 29 to October 2, 1996

The most recent developments in biological nutrient removal, treatment of toxics in sludges, fundamentals of microbiology, the design of biological systems and modeling of biological treatment will be presented by international authorities. Among the presenters are Wes Eckenfelder, Cliff Randall, Les Grady, Glenn Daigger, Aarne Vesilind, Mike Gerardi and Nancy Love. Representatives from companies that manufacture equipment used in biological treatment systems and that sell modeling software will also be a part of the program, making presentations, offering demonstrations and exhibiting their products. Among the materials that will be included in the cost of the program are books authored by some of the presenters, a conference notebook, selected software, additional handouts and Continuing Education Units.

The Hotel Roanoke is a recently renovated hotel and new conference center and is conveniently located within walking distance of the downtown shopping and dining market district. A covered walkway connects the conference center with downtown. Please contact Rebecca Shelor of Virginia Tech's Division of Continuing Education for more information about the program: 441 Donaldson Brown Hotel and Conference Center, Virginia Tech, Blacksburg, Virginia 24061-0104, 540/231-2787, fax 540/231-9886, or e-mail rshelor@vt.edu

# The 12<sup>th</sup> International Conference on Solid Waste Technology and Management

Philadelphia, Pennsylvania November 17-20, 1996

Call for Papers

A major international conference on solid waste management will be held in Philadelphia on November 17-20, 1996. Papers related to all aspects of solid waste technology and management are of interest. A one-page abstract (in English), to be received no later than April 19, 1996, should be sent to the following address: Dr. Ronald L. Mersky, Program Chairman, Department of Civil Engineering, Widener University, One University Place, Chester, PA 19013-5792, USA, 610/499-4042 or fax 610/499-4059.

Authors will be notified by May 10, 1996, concerning acceptance or non-acceptance of submitted abstracts. A discounted conference registration fee wil be available for authors of papers accepted for presentation. Papers presented at the conference may be reviewed for possible publication in the Journal of Solid Waste Technology and Management.

## IWSA/IAWQ Joint Specialist Conference Reservoir Management and

Water Suppy An Integrated System

> Prague, Czech Republic May 19-22, 1997

The conference will focus on the integration of the water shed, the reservoir, and the treatment plant in providing drinking water. The conference scope includes: 1) water shed protection; 2) physical, chemical, and biological processes within the reservoir that affect water quality, and; 3) water treatment.

For additional information about the conference, please contact Dr. Petr Dolejs, IWSA/IAWQ Conference, W&ET Team, Box 27, Pisecka 2, 370 11 Ceske Budejovice, Czech Republic, phone/fax 42-38-41624 or e-mail petrodol@marvin.jcu.cz

For consideration of paper presentation at the conference, prospective authors should submit a 1000 word abstract with two-four diagrams by 30 July 1996 to Petr Doleis.

continued...

# The First International Conference on Environmental Restoration

Ljubljana, Slovenia July 7-9, 1997

Call for Papers

Papers for both platform and poster presentation are solicited for the First International Conference on Environmental Restoration to be held in Ljubljana, Slovenia, July 7-9, 1997. Please send two-page abstracts (1000 word equivalent) to the Conference Chair at the address below by September 15, 1996. The Conference is being organized by the Environmental Restoration (ER) Specialist Group of the International Association on Water Quality(IAWQ) and the Slovenian Water Pollution Control Association (SDZV).

For more information contact: Dr. Milenko Ros, IAWQ Conference on Environmental Restoration, Slovenian Water Pollution Control Association, Hajdrihova 19, P.O. Box 3430, SLO-1001 Ljubljana, Slovenia, TEL: +386611760237, FAX: +386611259244, or e-mail: milenko.ros@ki.si

## 2<sup>nd</sup> International Conference on Microorganisms in Activated Sludge and Biofilms

Berkeley, California July 21-23, 1997

Call for Papers

Abstracts are requested by August 15, 1996 for papers and posters for the 2<sup>nd</sup> International Conference on Microorganisms in Activated Sludge and Biofilms to be held in Berkeley, California, July 21-23, 1997. The conference is sponsored by the International Association on Water Quality, the California Water Environment Association (and its San Francisco Bay Section) and the University of California at Berkeley and Davis. For further information please contact the Conference Chair, Professor David Jenkins at 637 Davis Hall, University of California, Department of Civil and Environmental Engineering, Berkeley, CA 94720-1710, 510/642-5337, fax 510/527-0672, oremail jenkins@ce.berkeley.edu

Conference information updates will be posted on the World Wide Web on the Environmental Engineering homepage at http://www.ce.berkeley.edu

## EMPLOYMENT OPPORTUNITIES

## **Bucknell University**

The Department of Civil Engineering at Bucknell University solicits applications for an entry-level tenure-track assistant professor position in the area of environmental engineering beginning with the Fall semester, 1996. The successful applicant will be expected to teach environmental courses for both engineering and non-engineering students. The candidate's interests may be in any area of environmental engineering, but the following areas are preferred: physico-chemical processes; water treatment; risk assessment and contaminant transport; solid waste management and waste minimization; or air pollution control. Applicants should have an earned doctorate in civil engineering and an undergraduate in civil engineering degree from an ABET-accredited institution. Professional registration, industrial experience, and previous teaching and research experience are desirable. Bucknell University is primarily an undergraduate institution with an MSCE program. Bucknell has excellent environmental laboratory facilities, and a full-time laboratory director.

Please send a resume with the names of three references to Professor Jeffrey C. Evans, Environmental Faculty Search Committee, Department of Civil Engineering, Bucknell University, Lewisburg, PA 17837. Screening of applicants will begin on April 11, 1996, and continue until the position is filled.

Bucknell University encourages applications from women and members of minority groups (EEO/AA).

## University of Washington

The Department of Civil Engineering at the University of Washington invites applications for a tenure-track position in the Environmental Engineering and Science program effective autumn quarter, 1996. The position to be filled focuses on the effects of human activities on natural aquatic systems, including lakes, wetlands, estuaries and streams. Applications are sought from candidates with interests in the biological, chemical, and physical processes that relate to natural aquatic systems and with experience in applying engineering or modeling approaches to natural aquatic systems. Applications are particularly encouraged from individuals who are involved in field applications and from individuals interested in the design and implementation of restoration and protection strategies. The appointment is expected to be at the level of Assistant Professor. The successful candidate will be expected to demonstrate high quality teaching at the undergraduate and graduate levels, to develop a strong research program, and to supervise Master's and Doctoral students.

Applications will be considered starting March 15, 1996 and will be accepted until the position is filled. Send resume and the names addresses, and phone numbers of at least three references to Professor Joel Massmann, Search Committee Chair, Department of Civil Engineering, Box 352700, University of Washington, Seattle, WA 98195-2700.

The University of Washington is an Equal Opportunity/ Affirmative Action Employer.

## **McGill University**

For information concerning an opening at McGill University in Montreal, Quebec, in geoenvironmental engineering at the assistant professor level, access their web page @ http://www.mcgill.ca

#### OTHER CONFERENCES...

July 14-17, 1996 - AWRA Annual Summer Symposium "Water Restoration Mgmt.: Physical, Chemical, & Biological Considerations. Syracuse, NY. Contact: AWRA, 703/904-1225 or fax 703/904-1228.

September 22-26, 1996 - AWRA 32nd Annual Conference & Sym. on "GIS & Water Resources. Ft. Lauderdale, FL. Contact: AWRA, 703/904-1225 or fax 703/904-1228.

September 23-25, 1996 - Nat'l Sym. on the Efficetiveness of Erosion & Sediment Control Practices. Raleigh, NC. Contact: Toby Vinson, NCDEH & NR, P.O. Box 27687, Raleigh, NC 27611 919/733-4574.

## 41st Annual Institute in Water Pollution Control Manhattan College Riverdale, New York June 3-7, 1996

Manhattan College's forty-first annual Institute in Water Pollution Control will take place on June 3-7, 1996 in the Manhattan College Leo Engineering Building, Riverdale, New York. Two courses, which run concurrently, will be offered: Modern Eutrophication Modeling, and Treatment of Municipal, Hazardous and Toxic Wastewaters. These week-long courses have much to offer young engineers and seasoned professionals who have not been able to stay abreast of the rapidly changing field. Set in a classroom atmosphere, the courses allow for dialog between lecturer and participants. The fee per course is \$1,150 and includes a set of notes for each attendee.

For a brochure or additional information, contact: Ms. Lucia Chiocchio, Program Coordinator, Manhattan College, Environmental Engineering Department, Riverdale, NY 10471, 718/920-0277, fax 718/543-7914.

## GENERAL NEWS

#### PEOPLE IN THE NEWS...

President Peter McPherson, Michigan State University, presented one of six Teacher-Scholar Awards to **Susan J. Masten**, Associate Professor of Civil and Environmental Engineering, at the annual Awards Convocation on February 13, 1996. University Teacher-Scholar Awards are given to faculty members who, early in their careers, earn the respect of students and colleagues for their devotion to and skill in teaching. The criteria for selection include: effectiveness of teaching or, alternatively, its impact on students; use of innovation techniques and/or approaches in teaching; peer assessments of teaching; and evidence of public service and of promise as a scholar.

Raymond C. Loehr, Ph.D., P.E., DEE, has been named as the recipient of the Cordon Maskew Fair Award, to be presented by the American Academy of Environmental Engineers at the Academy Awards Luncheon on April 11, 1996 at the National Press Club in Washington, DC. Dr. Loehr is the H.M. Alharthy Chair and Professor, Environemtnal and Water Resources Engineering Program, at the University of Texas at Austin. He is also Director of the Environmental Solutions Program which is an entity that works with industry to find solutions to environmental problems.

Dr. Robert C. Ward, Director of the Colorado Water Resources Research Institute and Professor in the Department of Chemical and Bioresource Engineering at Colorado State University is serving as President of Universities Council on Water Resources Board of Directors for 1996. Universities Council on Water Resources is an organization wich encourages and supports university education, research and service related to the water environment.

The Department of Civil and Environmental Engineering at the University of Maine is pleased to announce that Lenly Weathers has joined its faculty. Professor Weathers earned his Ph.D. for The University of Iowa in environmental engineering in the area of biotransformation of chloroform under methanogenic conditions.

The Environmental Engineering program at the University of Connecticut is pleased to announce the addition of two new faculty members - **Dr. Can Erkey**, Ph.D. from Texas A&M University in the area of supercritical fluid technology; and, **Dr. Joseph Helble**, Ph.D. from MIT in the area of air pollution.

## **Organizations of Interest**

## Saxton Introduces Bill to Create NIE

Legislation to establish a National Institute for the Environment (NIE), to improve the scientific basis for environmental decision-making, was introduced on December 21, 1995 by Rep. Jim Saxton (R-NJ), chair of the House Resources Subcommittee on Fisheries, Wildlife and Oceans.

The NIE is a proposed environmental science Institute whose sole mission is to strengthen the scientific basis for environmental decision-making. The NIE will provide information the nation needs to anticipate, respond to and prevent complex environmental problems.

"The NIE proposal has been truly close to my heart for over five years," said Saxton. "There have been changes in the political arena which make the atmosphere on Capitol Hill more conducive to a 'smart government' initiative such as the NIE. The NIE will make government work better, cheaper and more efficiently with smarter regulations and sound science. It's time to move environmental policy out of the moody political spectrum where it is now, and get it based on science where it belongs," Saxton stated.

At press time, the bill (H.R. 2927) to establish the NIE has 21 bipartisan cosponsors, including Sherwood Boehlert (R-

NY), Connie Morella (R-MD), Curt Weldon (R-PA), Vern Ehlers (R-MI), Ron Dellums (D-CA), Mike Ward (D-KY), Chris Shays (R-CT), Peter Blute (R-MA), Porter Goss (R-FL), Patrick Kennedy (D-RI), Martin Olav Sabo (D-MN), John Olver (D-MA), Sidney Yates (D-IL), Chris Smith (R-NJ), Peter Torkildsen (R-MA), Tom Davis (R-VA), Wayne Gilchrest (R-MD), Joe Barton (R-TX), Scott Klug (R-WI), Marge Roukema (R-NJ) and Lynn Woolsey (D-CA).

(Reprinted with permission from the NIE Newsletter, Winter 1996.)

#### From the editor's desk...

As the current AEEP Newsletter editor, I have enjoyed the opportunity to serve the Association in this capacity for the past five years, but feel it is time to have a new editor. It is an excellent opportunity to learn more about AEEP activities and meet some dedicated environmental engineering professors. If you are interested in the position, please contact me through e-mail (chetrock@maine.maine.edu) or phone 207/581-2170.

## On-Line Info

#### LOOKING FOR WORK?

Some of you may already know via Margaret Fleck's web page, but a rather extensive web page @ UMass has been created to assist those currently doing an academic job hunt. It lists those schools that are known to be hiring along with a link to the university's page. The page had position inside and outside the U.S., post-docs, and research labs, along with links to other useful pages. See: http://zoo.cs.umass.edu/~kaplan/jobs/job db.html

#### **OPEN UNIVERSITY ON THE INTERNET**

The British Open University, whose pioneering work in distance learning has served as a model for institutions around the globe, now is making some of it courses available over the Internet to English-speaking students internationally. <a href="http://cszx.open.ac.uk/zx/">http://cszx.open.ac.uk/zx/</a> or send e-mail to Internet-Course-Info @ open.ac.uk. (WICHE Communique Jan 96 p. 13)

#### REMEDIATION W/IRON METAL

From: Paul G. Tratnyek Environmental Science and Engineering Oregon Graduate Institute/Portland, OR tratnyek@ese.ogi.edu

With all the current interest in remediation technologies based on zero-valent metals, we get alot of questions from various types. This inspired a web page that is now available at: http://www.ese.ogi.edu/ese\_docs/trantnyek/iron.html
There is also a page with a list of references on the topic that should be comprehensive:

http://www.ese.ogi.edu/ese\_docs/tratnyek/ironrefs.html This list is long, so I'm sure we missed a couple. We welcome corrections from anyone. Enjoy!

#### AMERICAN WATER RESOURCES ASSOCIATION

AWRA has moved into the Information Superhighway with its new site on the WWW. The homepage can be accessed at: http://www.uwin.siu.edu/~awra

# AEEP TEACHING WORKSHOP 3 AUGUST 1996 University of Maine

One of the primary objectives of AEEP is to assist the membership in developing teaching materials and techniques. In an effort to keep abreast of the revolution in engineering education taking place at this time, the Association is sponsoring a teaching workshop on the Saturday immediately preceding the AAEE/AEEP Engineering Education Conference. This workshop brings together some of the top engineering education theorists in the country, along with a panel of our own master teachers who will share some of their ideas with you, and solicit your comments and experiences in return. The cost of the workshop is \$50 and registration can be included when registering for the conference. See page 10 for registration details.

#### Tentative Program

8:30 Introductions

8:35 Cynthia J. Atman, Department of Industrial Engineering University of Pittsburgh

"Assessment of Engineering Learning"

10:00 Break

10:30 Karl A. Smith, Department of Civil Engineering University of Minnesota "Problem-based Learning"

12:00 Box lunch

#### 1:00 "How do I ...?" Break-out discussions, Group I

- A. "...teach a capstone design course?" JoAnn Silverstein, University of Colorado
- B. "...teach environmental organic chemistry?"
- C. "...teach environmental microbiology?" Bruce Rittmann, Northwestern University

#### 2:00 "How do I...?" Break-out discussions, Group II

- D. "...teach environmental ethics?" Pl. Aarne Vesilind, Duke University
- E. "...teach large introductory environmental engineering courses?" Jim Alleman, Purdue University
- F. "...use the world wide web in teaching environmental engineering?" Kurtis Paterson, Michigan Tech

3:00 Break

- 3:30 Reports from break-out discussions
- 4:00 Informal discussions, adjournment, attitude adjustments, etc.

## AAEE/AEEP CONFERENCE BACKGROUND

Starting in 1960, the Association of Environmental Engineering Professors (AEEP) and the American Academy of Environmental Engineers (AAEE) have organized a half dozen conferences to guide the growth of environmental education. The conferences have had a major influence of the development and direction of environmental engineering education.

The focus of the Seventh Conference will be the examination of the structure and function of environmental engineering education and practice. Specifically, conference participants will:

- Evaluate the undergraduate curriculum as it relates to inclusion of basic science fundamentals, laboratory experience and engineering design coursework;
- Evaluate the graduate curriculum as it relates to integration of teaching engineering design, conducting basic and applied research, and advancing the profession;
- Evaluate outcome assessment, certification programs, and continuing education requirements for practicing environmental engineering; and
- Evaluate the role of the practitioner in education, including site visits, case studies, capstone design, exchange programs, and teaching.

The structure for the August 1996 meeting will include a pre-conference teaching workshop (see preceeding column); presentation of papers by both academicians and practitioners; and a poster session featuring case studies on successful laboratory experiments, capstone design projects, and utilization of interactive television and electronic media (see page 7). The emphasis will be on providing information that can be used in environmental engineering education and practice.

The success of the Conference will depend upon the active involvement of both educators and practictioners and is especially important for the poster session. Many AEEP members have asked for a Conference that provides "information that can be taken home". The poster session has been added to facilitate this exchange.

# AAEE/AEEP Environmental Engineering Education and Practice Conference Orono, Maine August 3-6, 1996

#### Tentative Schedule

#### SATURDAY, AUGUST 3, 1996

Teaching Workshop: Teaching Environmental Engineering (see page 8)

#### SUNDAY, AUGUST 4, 1996

Session 1:

## Environmental Engineering Work Force and Markets: Today and Tomorrow

Robert Baillod, Michigan Technological University
Ed Cichon, Metcalf and Eddy, Boston, MA
Phil Hall, CH2M/Hill, Denver, CO
Darryl Hertz, M W Kellogg, Houston, TX
Richard Miller, Miller and Associates, Norcross, GA
Dave Sonstegard, 3M Environmental Technology and
Services, Minneapolis, MN

#### Banquet Entertainment:

Tim Sample and Bob Bryan, Maine Humorists
"Bert and I"

#### MONDAY, AUGUST 5, 1996

Session 2:

#### Skills and Attributes Required of the Environmental Engineer: Practitioners' Perceptions

Robert Marini, Camp, Dresser and McKee, Boston, MA John Wilkinson, Exxon Research and Engineering Technology, Edison, NJ

#### Session 3:

#### Educational Approaches and Curricula for Development of Requisite Skills: Educators' Perceptions

William P. Ball, The Johns Hopkins University
Francis A. DiGiano, Univ. of North Carolina, Chapel Hill
C.P. Leslie Grady, Clemson University
Perry L. McCarty, Stanford University

#### Luncheon Speaker:

Winfred Phillips University of Florida ASEE President-Elect

#### Session 4:

#### Role of Practitioners in Education

Hugh J. Campbell, Jr., DuPont Chemicals, Wilmington, DE Ray Letterman, Syracuse University Arthur Purcell, Preventive Environmental Management, Los Angeles, CA David Thompson, Haley and Aldrich, Cambridge, MA

#### Session 5:

#### Involvement of Educators in Practice

Avery Desmond, University of Michigan Dee Ann Sanders, University of Missouri (Rolla)

Poster Session

#### Banquet Speaker:

John Prados, National Science Foundation "Engineering Education for the 21st Century"

#### TUESDAY, AUGUST 6

Session 6:

#### Outcome Assessment

William Anderson, AAEE
Trudy Banta, Indiana University-Purdue University in
Indianapolis
Anthony Collins, Clarkson University
Barbara Old, Colorado School of Mines

Joseph Sussman, Bayer Diagnostics

#### Session 7:

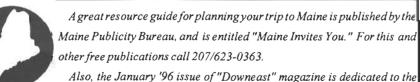
#### Summary Session

Roger Dolan, AAEE President CliffRandall, AEEP President

Use the registration form on page 10 or for information contact:

Environmental Engineering Conference
Conference and Institutes Division
University of Maine
5724 Dunn Hall
Orono, ME 04469-5724

Tel: 207-581-4092 Fax 207-581-4087



greater Bangor area, of which Orono is a part. This would be a great

mesource for anyone visiting the area. This may be purchased by calling 800/766-1670.

#### Poster Session

Practitioner Participation in the UNLV Environmental Engineering Program—David E. James, Civil and Environmental Engineering, University of Nevada, Las Vegas, NV

The Engineering & Public Policy Capstone Project Course—Mitchell J. Small, Civil & Environmental Engineering, and Engineering & Public Policy, Carnegie Mellon University, Pittsburg, PA

Manhattan College's New Undergraduate Environmental Engineering Program Launches "The Company"—Scott Lowe and James Mueller, Environmental Engineering Department, Manhattan College, Riverdale, NY

A Quantitative Model of Environmental Engineering Education—Marilyn Barger, Department of Civil Engineering, FAMU-FSU College of Engineering, Tallahassee, FL

Environmental Engineering Education in Tasmania—Peter E. Doe, Department of Engineering, University of Tasmania, Launceston.

Summer Mentoring Program: A Bridge Between Undergraduate and Graduate Studies—Andrew Randall, Department of Civil and Environmental Engineering, University of Central Florida, Orlando, FL

Assessment of the Formation of a National Student Environmental Engineering Organization—James R. Mihelcic, Department of Civil & Environmental Engineering, Michigan Technological University, Houghton, MI; Allen P. Davis, Department of Civil Engineering, University of Maryland, College Park, MD; John C. Little, Department of Civil Engineering, Virginia Polytechnic Institute and State University, Blacksburg, VA

Using The World Wide Web and Multimedia as Environmental Learning Tools—Randy Dymond, Department of Civil Engineering, University of Wisconsin-Platteville, Plattteville, WI

Fundamentals of Environmental Engineering: A Multi-Media Textbook—Sandra Woods, Department of Civil, Construction, and Environmental Engineering, Oregon State University, Corvallis, OR

In Situ Subsurface Remediation Technologies: Integration into an Interdisciplinary Engineering Curriculum—John S. Gierke, Department of Geological Engineering and Sciences, David R. Shonnard, Department of Chemical Engineering and Alex S. Mayer, Department of Civil and Environmental Engineering, Michigan Technological University, Houghton, MI

Lake Acidification Monitored with Virtual Instruments by Undergraduates—Monroe L. Weber-Shirk, Leonard W. Lion, and Jim Bisogni, Jr, School of Civil and Environmental Engineering, Cornell University, Ithaca, NY

Case Studies of Environmental Engineering Problems using Chemical Speciation-Transport Modeling—Kevin J. Farley, Environmental Engineering Department, Manhattan College, Riverdale, NY and Benjamin E. Miller, Environmental Systems Engineering, Clemson University Clemson, SC

An Innovative Field Laboratory Course—Nada Assaf-Anid, John D. Mahony, and Kevin J. Farley, Environmental Engineering Department, Manhattan College, Riverdale, NY

Laboratory Exercise: Partition of Solutes Between Environmental Compartments—Susan E. Powers, Department of Civil and Environmental Engineering, Clarkson University, Potsdam, NY

The Lab-based Course in Process Fundamentals—Lynn E. Katz, Department of Civil and Environmental Engineering, University of Maine, Orono, ME

Issues in Professional Engineering Practice: Applied Ethics—Ronald Bucknam, Institute of Professional Practice, University of Washington, Seattle WA

National Pollution Prevention Center for Higher Education— Jonathan W Bulkley, National Pollution Prevention Center, University of Michigan, Ann Arbor, MI

#### Environmental Engineering Chairs Meeting

It has been suggested that the chairs of environmental engineering departments have a get-together at the AAEE/AEEP meeting this summer. One of the reasons Joe Delfino made the suggestion that Environmental Engineering is independent of Civil Engineering at the University of Florida, and as a consequence, they do not participate in the traditional ASCE meeting of Civil Engineering Department Chairs. If others are also interested, the organizing committee will make arrangements for a meeting. Tentatively, we have identified Sunday (Aug 4th) for a brunch meeting (10:00 am to noon). Certainly, environmental engineers who are chairs of civil departments, too, would be welcomed.

If you think this meeting would be beneficial and you would like to participate, please let Chet Rock know so we can confirm the interest and schedule a room.

Chet A. Rock
University of Maine
Dept. of Civil & Environmental Engineering
5711 Boardman Hall
Orono, ME 04469-5711
Fax: 207/581-3888 or Phone 207/581-2170
email-chetrock@maine.maine.edu

# AAEE/AEEP Environmental Engineering Education & Practice

#### CONFERENCE

## REGISTRATION DEADLINE IS JULY 15, 1996

Name:	Comp	oany:	T	itle:
Address:		_ City:	State:	Zip:
Telephone:(w)	(h)		e-mail:	
Pre-Conference Worl	rehan (AFFD Day I	ong Tooch	wa Workshop on Au	aust 3 - limited to 50
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_	r June 15, 1996			\$
	· ·	charge for all	cancellations. No refunds w	ill be granted after July 15, 1996.
Dinners August 3rd/4	th No cost to partic	<u>cipants, gue</u>	st prices noted.	
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August 4th (\$18) #-	— Grilled Chicken	#G	rilled Salmon	\$
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A block of rooms have responsible for arrangi	been reserved for thing for their own off	ne conference campus lodg	e at the following hote ging accommodations.	els. The participant is
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Double Room: \$50.00/i	night.*		Single Room: \$4	5.00/night*
(*plus tax & gratuity)			\$651	

Reservations should be made by July 8, 1996. The block of rooms will be released after this date and will be available only on a first come, first serve basis.

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#### inthe

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Association of Environmental Engineering Professors

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Chet A. Rock Editor, AEEP Newsletter University of Maine Department of Civil and Environmental Engineering 5711 Boardman Hall Orono ME 04469-5711

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