14,21

## **Environmental Engineering Education Conference Draws Large Attendance**

More than 125 members of AEEP and AAEE converged on Michigan Technological University in scenic Houghton, Michigan to participate in the fifth conference on environmental engineering education. The purpose of the conference was to explore curricular and other educational needs in the preparation of graduates for professional and research practice. Three specific themes were explored: 1) integration of computers into environmental engineering education and research, 2) the role of design and operation in environmental engineering education, and 3) integrated air, water and land approaches in environmental engineering education. The conference format featured the presentation of position papers and comments by members of the three task committees followed by small group and general discussions. The plenary session on the last morning of the conference identified specific resolutions related to the three topic areas upon which a concensus existed.

Consensus on most of the computer-related resolutions was relatively easily achieved. Many of those at the conference had already integrated software applications into one

or more courses, and their descriptions of these experiences were both stimulating and convincing of the many benefits of such software. There was strong feeling that students gain experience on microcomputers in particular, because of the many labor saving tools available on micros such as word processors, spreadsheets, data base managers, and etc. Most of the discussion centered on issues such as the concern that modeling not replace thinking, that students be as well versed in the limitations as in the powers of modeling, and concerns for how increased integration of computer applications into curricula might be achieved. Some participants expressed concern that software development is inhibited by the way faculty productivity is currently evaluated.

The summary discussions on design and operation in environmental engineering education primarily addressed three issues. There was general agreement that the teaching of design must include topics such as forensics, ethics, regulations, and risk assessment and risk management. In

(Continued on page 2)

## AEEP NEWS AND ANNOUNCEMENTS

## Distinguished Lecturer for 1987

This year's AEEP Distinguished Lecturer will be Mr. Francois Fiessinger, Director of Research of the Societe Lyonnaise des Eaux, one of the largest water utilities in France and the world. Mr. Fiessinger directs a research laboratory of 50 professionals and has conducted extensive research on water clarification and disinfection over the past 12 years.

Mr. Fiessinger has agreed to prepare three lectures for the Distinguished Lecturer tour next spring:

- Coagulation with Aluminum Chorides
   This talk will summarize ten years of work carried out by Mr. Fiessinger and his colleagues on drinking water treatment applications. It will focus on the more basic research aspects and includes:
  - 1) identification of aluminum species
  - 2) structure of floc particles
  - 3) mechanisms of particle removal
  - 4) flocculation and floc properties, and
  - 5) practical implications and potential improvements.

## AEEP Workshop at WPCF Conference to Address Gas Transfer

The annual AEEP workshop held in conjunction with the Water Pollution Control Federation's annual conference will be given by Professors Michael K. Stenstrom and Paul V. Roberts. The workshop will address "Gas Transfer in Water and Wastewater Treatment Systems."

In line with the philosophy of AEEP workshops held in recent years, the workshop is designed to make recent advances more accessible to environmental engineering educators and students so that there is a shorter time lag and lesser knowledge gap between research in a certain area and its use in the classroom. To facilitate this transfer of knowledge, lecture notes (outlines and copies of figures, tables, and relevant equations) will be given to each participant.

The workshop will be held on the Sunday before the WPCF Conference (October 5) from 1:30 to 4:30 pm. The site of the workshop will be Room 3400 Boelter Hall on the UCLA

(Continued on page 2)

(Continued on page 2)

### Environ. Eng. Education Conference

addition, process dynamics and control must also be taught as part of design. Other discussions on design and operation issues depended in part on the definition of design (by ABET and otherwise) and no consensus was forthcoming.

The general resolution of the integrated air-land-water approaches in environmental engineering education discussion was that because of faculty size and curricular limitations, the responsibility of increased integration of multi-media awareness lies with individual faculty members. Faculty were urged to actively seek opportunities for professional development which would increase their awareness and understanding of integrated approaches. Another suggestion was the increased use of outside professionals to augment faculties' expertise in multimedia problems.

The success of the conference was due in large measure to the efforts of C. Robert Baillod, conference organizer, and the chairman and members of the task committees. The position papers focused the discussions and served as the basis for generating the conference recommendations. A report on the conference, including position papers, summaries of discussions and the conclusions and resolutions will be forwarded to AEEP members in the fall.

The conference also marked the introduction of the AEEP Computer Manual. The AEEP Computer Manual consists of software for 44 programs (on four diskettes) written for IBM compatible microcomputers together with hardcopy documentation. John Crittenden, organizer and editor of the manual, explained that the manual is seen as a "work-in-progress" and hoped that others who have developed software appropriate for educational use would contact him to contribute it to the next version of the manual. Many of the software developers provided informal demonstrations of their programs during one of the afternoons of the conference. Copies of the manual (\$20 for AEEP members) are available from Desmond Lawler at the University of Texas at Austin.

Continued from page 1

#### **WPCF Conference**

campus. Since the campus is approximately 15 miles from the conference center, a charter bus will pick up attendees at the convention center and at the Bonaventure Hotel. The cost of the round trip is included in the registration fee. You must preregister to guarantee a seat on the bus however. For those traveling by car, parking will be available on the UCLA campus for a fee.

Registration for the workshop is \$25 for AEEP members, \$10 for students, and \$50 for non-AEEP members. The workshop is an AEEP sponsored event and is not one of the WPCF-sponsored pre-conference seminars; hence this notice and an announcement/registration form recently sent by direct mail to all AEEP members are the only ways you will know of this workshop. Please share this information with students and colleagues who are not AEEP members.

For further information and registration forms, contact:

Professor Michael K. Stenstrom Civil Engineering Department University of California at Los Angeles 4532 Boelter Hall Los Angeles, CA 90024 (213) 825-1408

Preregistration is appreciated.

#### **Distinguished Lecturer**

 New Developments in the Use of Ozone for Drinking Water Treatment

This lecture will be a presentation of applied work carried out at the Societe Lyonnaise des Eaux. It will include:

1) optimization of ozone production

2) deep U-tube contactors vs. conventional chambers

 evaluation of ozone action (disinfection, organics, taste and odor, etc.)

4) monitoring of ozone dosage

5) combination of ozone and UV

6) combination of ozone and activated carbon.

The industrial applications and plant design implica-

tions will be discussed.

 Membranes - Ultrafiltration and Microfiltration for Industrial Water Treatment

This will be a general presentation. In the light of the research program carried out at the Societe Lyonnaise des Eaux, the talk will discuss the potential advantages and problems in applying large scale membrane separation to water treatment. Mr. Fiessinger will speak primarily on drinking water treatment but will include some wastewater treatment considerations.

Mr. Fiessinger's lecture tour will be arranged sometime during the period February 15-March 31, 1987. Institutions which are interested in hosting Mr. Fiessinger should send a letter request by November 15, 1986 to:

Prof. Makram T. Suidan Room 3230 Newmark Civil Engineering Laboratory University of Illinois 208 North Romine Urbana, IL 61801 (217) 333-9017

The letter request should contain the following information:

- Name of institution and contact person.
- Whether the program will be co-hosted with another institution.
- Preferred lecture topic and whether a video tape of the lecture could be made.
- Preference or restrictions on date for a visit during February-March; please try to be as flexible as possible.
- A brief statement describing how a vist by Mr. Fiessinger would fit into your institution's current academic activities.

Costs of the lecture tour are shared among the host institutions on a total lump sum, fixed cost basis. It is anticipated that each university would contribute approximately \$800 to cover cost of travel and living expenses, as well as to provide a modest honorarium. The Distinguished Lecturer Committee will review the requests and arrange an itinerary. It is anticipated that there will be more requests for visits than may be accommodated on one tour. In this case the Committee's decision will be guided by several criteria including: special consideration for those institutions which have not been visited by a Distinguished Lecturer within the last year or two, focus of research and teaching activities at the institutions, and the possibility of having two or more institutions co-host a visit.

## Exploratory Research Funding

In May, you all received "Protecting Our Environment: The Need for Exploratory Research", a document prepared by my committee. A few of you have written for more copies, which are available, and for the FACT SHEET, which the committee will soon finish. The FACT SHEET gives AEEP's best estimate of how much should be spent on exploratory research (the term "exploratory" is not restricted to EPA's program with that title). We could also use your suggestions as to how to arrive at our estimate.

Everyone in Washington that I talk to suggests the strength of AEEP is the geographic diversity of its membership. We are perhaps too small an organization to make an

impact in Washington among the highly paid lobbyist groups. However, we can influence the political process at the state and congressional district level. Politicians will listen to their constituents. I ask you again to consider taking some action. Below are the names of some important congressmen and senators to contact. If they are from your state, send them a copy of "Protecting Our Environment: The Need for Exploratory Research." If you don't speak up, no one else will do

Francis A. DiGiano, Chairman Legislative Analysis Committee

#### Senate Committee on Environment and Public Works

Robert T. Stafford, VT, Chm. Alan K. Simpson, WY James Abdnor, SD Steven D. Symms, ID Gordon J. Humphrey, NH Pete V. Domenici, NM David Durenberger, MN Quentin N. Burdick, ND Gary Hart, CO Daniel Moynihan, NY George J. Mitchell, ME Max Baucus, MT Frank R. Lautenberg, NJ

## House Sub-Committee on Health

Henry A. Waxman, Chm. James H. Scheuer Lindy Boggs Doug Walgren Richard C. Shelby William Hill Boner Ron Wyden

Bill Green

Jan Meyers, KS

Gerry Sikorski

Lawrence Coughlin

Bobet Smith Nill Timothy E. Wirth James J. Florio Thomas A. Luken Barbara A. Mikulski Mickey Leland Cardiss Collins William B. Richardson Jim Bates Edward R. Madigan William E. Dannemeyer Bob Whittaker Thomas J. Tauke Don Ritter Thomas J. Bliley, Jr. Howard C. Nielson Michael Bilirakis Fred J. Eckert

#### Senate HUD-Independent Agencies Appropriations Committee

Jake Garn, Chm. Lowell P. Weiker, Jr. Alfonse M. D'Amato James Abdnor Pete Domenici Patrick J. Leahy John C. Stennis William Proxmire J. Bennett Johnston Frank R. Lautenberg

#### House HUD-Independent Agencies Appropriations Committee

Edward P. Boland, Chm. 18 011 No belled and Environment Bob Traxler Louis Stokes Martin Olav Sabo promografia il negles Bill Green Jerry Lewis

\*Considers NSF budget

#### House Science and Technology Committee\*

Don Fugua, FL, Chm. Robert Roe, NJ George Brown, CA James Scheuer, NY Marilyn Wirth, CO Doug Walgren, PA Dan Glickman, KS Robert Young, MO Harold Volkmer, MO Bill Nelson, FL Stan Lundine, NY Ralph Hall, TX Dave McCurdy, OK Manuel Luian, NM Robert Walker, PA F. James Sensenbrenner, WI Claudine Scheider, RI Sherwood Boehlert, NY Tom Lewis, FL Don Ritter, PA Sid Morrison, WA Ron Packard, CA Robert Smith, NH entriebrie has peopled Paul Henry, MI Harris Fawell, IL Norman Mineta, CA Tim Valentine, NC Harry Reid, NV Robert Torricelli, NY Terry Bruce, IL Frederick Boucher, VA Richard Stallings, ID Bart Gordon, TN James Trafficant, OH Marilyn Lloyd, TN William Cobey, NC: Joe Barton, TX D. French Slaugter, VA David Monson, UT

## Annual Membership Meeting

The annual membership meeting/luncheon will be held at Noon, Monday, October 6, in Los Angeles in conjunction with the WPCF Conference. An announcement will be mailed giving the location and cost.

### Deadline for the December 1985 AEEP Newsletter

Anyone interested in submitting articles for the December 1986 issue of the AEEP Newsletter should do so no later than October 15, 1986. Articles should be mailed directly to the editor, and a limit a political in budgegeth and kiw stand

#### **AEEP Members Honored**

AEEP is pleased to congratulate Richard A. Conway of Union Carbide Corp. on his election to the National Academy of Engineering. The Academy specifically cited his "outstanding contributions to environmental engineering through improved standards of assessment, and for development of improved water treatment processes for industrial wastes."

Professor Daniel P. Loucks, of Cornell University, was honored with the ASCE's Julian Hines award at the recent Water Forum '86 in Long Beach, California. Professor Loucks was cited for his outstanding contributions to the advancement of knowledge of water resource systems analysis and its application to the planning and management of water resources worldwide.

Four AEEP members were cited as advisors of students honored by the AWWA's 1986 Academic Achievement Awards. Paul V. Roberts' advisee, Christoph Munz, received the first place award for doctoral dissertations. John Crittenden's advisee, John K. Berrigan, Jr., received the first place award for master's theses. Gary Amy and Gregory D. Reed directed the work of the second place dissertation and thesis award winners, respectively.

## **GENERAL NEWS**

#### American Academy of Environmental Engineers

The following article was prepared by Leo Weaver, P.E., Dipl., President AAEE. In his transmittal letter he noted "Rather than simply talk about the Academy I have elected to develop the brief piece 'Teachers and Practitioners.' It is designed to promote dialogue and I would judge its success accordingly."

#### **Teachers and Practitioners**

Recently John Andrews sent me a copy of the AEEP brochure. It is an attractive pamphlet and I was very interested in the description of the association's organization and objectives. The objectives are clearly spelled out "to strengthen and advance academic programs in the fields of environmental engineering, water and air resources, environmental health engineering and related fields." Worthy objectives, indeed! How does one strengthen and advance academic programs? This is a topic about which academicians and practitioners can spend much time discussing and writing. But there are certain fundamentals that can apply, and one of the foremost is that the teacher must prepare the student for practice. Can a teacher do this if he or she does not understand practice requirements? A teacher plays a role model for students. Practitioners remember well those professors who taught them the fundamentals of engineering and related subjects which stand them in good stead as they develop in their professional careers. Practitioners of Environmental Engineering are expected to obtain professional registration if they are to practice. Should not the student then expect his engineering teacher to be a registered professional engineer? Further, if a registered professional engineer is eminent in his practice of environmental engineering, his specialty capability may be recognized or certified by his peers through membership in the American Academy of Environmental Engineers. Over 2,300 Environmental Engineers are certified as Diplomates in specialties including General Environmental, Water & Wastwater, Air Pollution Control, Industrial Hygiene, Radiation Protection, and Solid Waste Management Engineering. And the Board of Trustees of the Academy have just established the certification specialty Hazardous Waste Management Engineer.

Ours is a closely woven profession. AEEP President John Andrews is a Trustee of the Academy representing ASEE. AEEP President-elect Bob Baumann is Chairman of the Academy's Engineering Education Committee. John has emphasized a number of times how strongly he feels about the need for the academician and the practitioner to work more closely together. It is happening but we must work harder at it if the professional and ultimately the public is to be the better for it.

For more information on AAEE membership write Bill Anderson, Executive Director, AAEE, 132 Holiday Court, Suite 206, Annapolis, Maryland 21401 or call 301/266-3311.

Editor's Note: AEEP members can become Diplomates of AAEE through direct application or through nomination by the AEEP Board of Directors, Watch for the annual announcement in the March Newsletter.

# American Society for Engineering Education (ASEE) Environmental Engineering Division (EED)

by William N. McKinnery, Jr., Chairman, EED

I would tike to take this opportunity to invite all of the members of AEEP who are not now members of ASEE/EED to join.

Your President, Professor John Andrews, who is a member of both organizations responded recently to one of our ASEE/EED newsletters. In that response he suggested that there should be more cooperation between our organizations. I have to say I heartily second that proposal, I appreciate this opportunity to speak to you and I know that all of the ASEE/EED members will be interested in reading a similar message from Professor Andrews.

Joining ASEE/EED can provide a number of specific benefits:

- the opportunity to participate in ASEE's National Conference held annually at various locations throughout the US.
- The opportunity to present papers on environmental engineering subjects at the EED Technical session and have those papers published.

Continued on next page

#### ASEE/EED

- The opportunity to participate in regional meetings held at various times of the year on specialty topics.
- The opportunity to meet and get to know many other people who are teaching environmental engineering.
- The opportunity to receive the EED newsletter which provides information about the Division and often features EED papers from the National Conference.

In our last newsletter I posed a challenge to the EED membership. Essentially I challenged them to "do something about communicating with the EED staff". I am very pleased that Professor Andrews took the opportunity to do just that.

I would like to pose an opportunity for those of you in AEEP: Join with us in this present climate of cooperation so we can help each other form a partnership that will better serve the environmental needs of all mankind. I say "all mankind" because the Environmental Engineers you teach work around the globe to improve our world.

The future of our organizations really rests with those of us who feel the students deserve to learn as much as possible about Environmental Engineering and that more interchange of information among the professors who teach them could do nothing but improve the information transfer and learning process. Isn't that what ASEE and AEEP are all about, improving the education of our engineering legacy?

I look forward to seeing many of your names on our roster

and to talking with many of you at our meetings.

For more information, contact the ASEE directly at:
American Society of Engineering Education
Suite 200
Eleven Dupont Circle
Washington, D.C. 20036
(202) 293-7080

## **NSF - Environmental Engineering Program**

Dr. Ed Bryan, Program Director of the Environmental Engineering Program at NSF recently announced the reassignment of Dr. Tapan K. Mukherjee to the Environmental Engineering Program. Dr. Mukherjee's initial emphasis will be on the groundwater aspects of the Environmental Engineering Program. Dr. Mukherjee was formerly Program Director, Minerals and Primary Metals Processing.

## Publisher Seeks Book Manucripts on Water-Related Topics

The American Water Works Association (AWWA) is seeking manuscripts for books on water production and distribution, utility management, system design, water and energy conservation, and financial forecasting for utilities. Manuscripts dealing with the maintenance of installed water utility systems are particularly sought.

Authors with manuscripts or proposals for book topics should contact:

John Rieman AWWA senior technical editor 6666 W. Quincy Ave. Denver, CO 80235 (303) 794-7711

# VISITING PROFESSOR POSITION SOUGHT

The AEEP Newsletter recently received a request from Dr. Jan R. Dojlido of the Institute of Meteorology and Waste Management in Warsaw, Poland, indicating his interest in obtaining a visiting professor position in water chemistry or analytical chemistry. His letter indicates that he has over 30 years teaching experience, has published extensively and has served as a consultant to WHO, UNIDO and UNESCO. Interested institutes should contact him directly at his current address:

Professor Jan R. Dojlido Higher Institute of Technology P.O. Box 68, Brack S.P.L.A.J. — LIBYA

## CONFERENCES

## Crystallization — Diffusional Operations and Processes

The Spring meeting of AlChE, to be held March 29-April 2, 1987 includes sessions on: 1) Crystal Growth, Particle Size Distribution, and Precipitation Kinetics for Inorganic Salts and 2) Crystal Growth and Purification of Materials. Abstracts should be submitted by September 15, 1986 to:

Dr. Robert W. Peters
Environmental Engineering
School of Civil Engineering
Purdue University
West Lafayette, IN 47907
(317) 494-2191

## **Wastewater Treatment**

The 9th Symposium on Wastewater Treatment will be held November 11-12, 1986 im Montreal, CANADA. The principal themes are: 1) Fundamental and Applied Research, 2) Operation of Treatment Plants, and 3) Environmental Effects. For more imformation contact:

Mr. Michel Cloutier
Technology Transfer & Training Division
Environmental Protection Service
Environment Canada
Ottawa, Canada
CANADA
K1A 1C8

## Chapman Conference

A Chapman Conference on "Microbial Processes in the Transport, Fate, and In-Situ Treatment of Subsurface Contaminants," will be held 1-3 October, 1986 at Snowbird, Utah. This Chapman Conference will foster cross-disciplinary communication of existing work, including work in the early research phase. Topics of sessions include subsurface sampling and activity measurement, laboratory studies of degradation processes, kinetic descriptions of biological reactions, field applications of modeling, in-situ treatment approaches, and others. In order to facilitate free and open communication, no proceedings will be published and attendance will be limited to 150 persons. We hope to establish a common basis upon which future research and development can proceed. For more information contact: Dr. Fred J. Molz, Department of Civil Engineering, Auburn University, Aurburn, AL 36849, (205) 826-4321 or the American Geophysical Union, 2000 Florida Avenue, N.W., Washington, D.C. 20009, U.S.A., Attn. Microbial Processes Meeting, (202) 462-6903.

#### IWRA Conference

Announcement and Call for Papers for the VIth International Water Resources Association World Congress on Water Resources to be held at the Ottawa Congress Centre, Ottawa. Ontario, Canada, from May 29 to June 3, 1988. The overall theme for the Congress is "Water for World Development". For information on abstracts, submissions and attendance, please write to:

The Secretariat Sixth IWRA World Water Congress on Water Resources University of Ottawa 631 King Edward Avenue Ottawa, Ontario K1N 6N5, Canada Telephone 613-564-3902

## **WELCOME TO NEW AEEP MEMBERS**

Congratulations to John Andrews and the AEEP membership for getting the word out about AEEP. We welcome 38 new members with this issue:

Dr. Frederic C. Blanc Civil Engineering Northeastern University Boston, MA 02115

Dr. James S. Bonner Center for Earth & Envir. Sciences State University of New York Plattsburgh, NY 12901

Dr. Francois Briere Ecole Polytechnique de Montreal C.P. 6079 Succ. A. Montreal, Quebec H3C 3A7

Dr. Robert P. Carnahan Civil Engineering & Mechanics University of South Florida Tampa, FL 33620-5350

Dr. Paul A. Chadik **Environmental Engineering Sciences** University of Florida Gainesville, FL 32611 (904) 392-0843

Dr. Michael R. Collins Civil Engineering Department University of New Hampshire Env. Engineering Sciences Durham, NH 03824 (603) 682-1407

Dr. Joseph S. Devinny
Env. Engineering Program
Univ. of Southern California
Los Angeles, CA 90089-0231

Dr. Audrey D. Levine
Civil Engineering
Iowa State University
Ames, IA 50011

Dr. Charles T. Discoll Dr. Karl E. Longley Syracuse University Syracuse, NY 13210 (315) 423-3434

Dr. J. Wayland Eheart Dr. Bruce E. Logan University of Illinois University of Arizona Urbana, IL 61801 Tuscson, AZ 85721 (217) 333-6962

Dr. Raymond A. Ferrara Civil Engineering Department Lafayette College Easton, PA 18042

Dr. Stephen D. Field Civil Engineering Department Louisiana State University

Baton Rouge, LA 70803-6405

Dr. Oliver J. Hao
Civil Engineering Department University of Maryland Dr. Larry W. Moore College Park, MD 20742 (301) 454-3857

Dr. John W. Klock Civil Engineering Department Arizona State University Tempe, AZ 85287

Dr. Ben Koopman Univ. of Florida, 322 Black Gainesville, FL 32611

Civil Engineering Department Civil & Surveying Engineering California State University Fresno, CA 93740 (209) 439-0531

Civil Engineering Department Civil Eng. & Engineering Mechanics (602) 621-2266

> Dr. Ross E. McKinney Civil Engineering University of Kansas Lawrence, KS 66044 (913) 864-3731

Dr. Gayle F. Mitchell Civil Engineering Department Mississippi State University Mississippi State, MS 39762 (217) 333-6962

Civil Engineering Dept. Memphis State University Memphis, TN 38152

> Dr. James M. Morand Civil & Environmental Engineering University of Cincinnati Cincinnati, OH 45221 (513) 475-5712

Dr. Nava Narkis Env. & Water Resources Eng. Technion-High Inst. Technology **Technion City** Haifa, ISRAEL 32000

> Dr. Roberto M. Narbaitz Civil & Environmental Engineering Florida International University Miami, FL 33199 (305) 554-3048

Dr. C. Dallas Reach, Jr. Civil Engineering University of Missouri Independence, MO 64050 (816) 254-3663

Dr. Mark J. Rood Civil Engineering Dept. University of Illinois Urbana, IL 61801

Dr. Gerald E. Spertel, Jr. Civil Engineering Department University of Houston Houston, TX 77004

Dr. Richard I. Stessel Civil Engineering & Mechanics University of South Florida Tampa, FL 33620 (813) 974-2581

Dr. Anthony J. Tarquin Civil Engineering Department University of Texas at El Paso El Paso, TX 79968 Dr. J. S. Taylor Civil Eng./Env. Sciences University of Central Florida Orlando, FL 32816

Mr. Rudy J. Tekippe Corporate Engineering Department James M. Montgomery, Consulting Engineers, Inc. Pasadena, CA 91101 (818) 796-9141

Dr. Marty Tittlebaum Civil Engineering Dept. Louisiana State University Baton Rouge, LA 70803 Ames, IA 50011

Dr. Mason Tomson Envir. Science & Engineering Rice University Houston, TX 77251 (713) 527-4951 Dr. Richrd F. Unz Civil Engineering Department The Pennsylvania State University University Park, PA 16802 (814) 683-2940

Dr. Thomas C. Voice Civil & Env. Engineering Michigan State University East Lansing, MI 48824

Dr. Yi-Tin Wang Civil Engineering Department University of Kentucky Lexington, KY 40506

Dr. A. Scott Weber Civil Engineering Department State University of New York Buffalo, NY 14260 (716) 636-2409

Dr. Raymond M. Wright Civil & Env. Engineering University of Rhode Island Kingston, RI 02881

## WELCOME TO NEW AEEP SUSTAINING MEMBERS

AEEP is pleased to welcome the following new Sustaining Members of the Association:

Organization	Contact Person
Brown & Caldwell (Walnut Creek)	Dr. Eric Mische
CH2M Hill, Inc. (Denver)	Dr. Glen T. Daigger
Century Engineering Inc. (Houston)	Dr. S. Srinanthakumar
Culp-Wesner-Culp (Edmonds, WA)	Mr. Gordon L. Culp
Eastman Kodak Co. (Rochester)	Dr. Richard Poduska
Lewis Publishers, Inc. (Chelsea, MI)	Mr. Edward E. Lewis
D. W. Ryckman & Assoc. (St. Louis)	Mr. D. W. Ryckman

## **AEEP SUSTAINING MEMBERS**

AEEP thanks the following organizations for their support of our activities.

**BROWN & CALDWELL** 

CH2M HILL, INC.

CENTURY ENGINEERING, INC.

CULP-WESNER-CULP

EASTMAN KODAK CO.

ENGINEERING SCIENCE, INC.

LEWIS PUBLISHERS, INC.

PROCTOR AND GAMBLE COMPANY

D.W. RYCKMAN & ASSOC.

#### **OFFICERS**

President John Andrews Environmental Science & Engineering P.O. Box 1892 Rice University Houston, TX 77251 (713) 527-4092

Vice President
E. Robert Baumann
Department of Civil Engineering
Iowa State University
496 Engineering Annex
Ames, IA 50010
(515) 294-4975

Secretary-Treasurer Bill Batchelor Civil Engineering Department Texas A&M University College Station, TX 77843 (409) 845-3079

Past President F. Michael Saunders School of Civil Engineering Georgia Institute of Technology Atlanta, GA 30332 (404) 894-2265

Richard R. Noss Editor, AEEP Newsletter University of Massachusetts Department of Civil Engineering Amherst, MA 01003

#### DIRECTORS

Gary L. Amy (1985-87) University of Arizona

John F. Andrews (1984-86) Rice University

Bill Batchelor (1984-1986) Texas A&M University

E. Robert Baumann (1986-88) Iowa State University

Nicholas L. Clesceri (1985-87) Rensselaer Polytechnic Institute

David Jenkins (1984-86) University of California, Berkeley

J. Charles Jennett (1985-87) Clemson University

Desmond F. Lawler (1986-88) University of Texas

Richard G. Luthy (1986-88) Carnegie Mellon University



