AEEP Newsletter

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PRESIDENT'S CORNER

My tenure as president is now at the midpoint and my opportunities/obligations to contribute to this column are three-fourths exhausted with this issue. The Education Conference and the IAWPR meeting have since passed (as have the numerous other meetings which, unfortunately, all seemed to be scheduled at the same time). Interestingly, my first experience with each of these meetings has come just this year. Perhaps this provided a different perspective, perhaps not. I must say, however, that I was impressed with each of the activities.

The former may be because I was party to the formulation of the Education Conference's final stages as AEEP President and could appreciate the effort invested by Jim Patterson and his committee members, group leaders, and arrangements people. While I prefer to let the content of the conference and my response and that of others to it mature before making comment, I can say that there were several aspects worthy of note. While the USA attendance was a bit lower than might have been desired (perhaps due to several reasons, not the least of which would be conflicting meetings such as AWWA, ASLO and the Gordon Conference) the representation from the international community was delightful and provided an added dimension. In addition to the invited speakers from England, Germany and Switzerland, attendees represented Japan, Portugal, Venezuela, Norway, and Israel, among others.

Lord Ashby's keynote address was truly the highlight of the conference and the man was as elegant as his address. In conversation with Lord Ashby, you got the impression that we had done him a great honor by inviting him. My feeling was that he had greatly honored us by accepting the invitation. I am sorry that all of you could not be present for that address and the other activities.

With the IAWPR meeting, I enjoyed the different character and conduct of the meeting. The formalized discussion format, in which I was privileged to participate, was a new experience. While not always in the context of a strong challenge and in fact sometimes dripping with sugary compliments (which seemed to be a general protocol), the formalized discussion added to the meeting. The discussors had to examine the presented paper in detail prior to the comments and the questions that were directed at the author(s). This gave greater depth to the exchange than is normally the case at most meetings. For those members who have yet to attend an IAWPR meeting, I would urge you to experience it once.

In closing, I reflect back on Bruce Hanes' comments in this column of July 1978 upon his return from the Stockholm meeting. He urged consideration of attendance at the Toronto meeting. Thanks Bruce, I did and I enjoyed.

Roger A. Minear

PURDUE MEETING OF AEEP BOARD

The AEEP Board of Directors met just prior to the Purdue Industrial Waste Conference and took action on several items of immediate interest to the membership. Among these the Board decided to:

1. Strictly enforce the policy that any member with dues more than two years in arrears be dropped from the membership rolls.
2. Invite Dr. Paul Hartman of ASEE to attend the October meeting of the Board to discuss possible avenues of improved communication and co-operation between ASEE and AEEP.
3. Reduce the number of issues of the NEWSLETTER published each year from four to three. One of the three issues will be expanded to cover some major items of general interest in considerable depth and will be distributed to a very wide audience including consultants, governmental agency personnel, etc.
4. Return to first class mailing for the NEWSLETTER. Experience with the bulk mailing permit has been very unsatisfactory with a three to four week delivery time not being uncommon.

WELCOME TO NEW AEEP MEMBERS

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OBSERVATIONS FROM THE 1980 AEEP DISTINGUISHED LECTURER TOUR

by Richard I. Dick
Cornell University

Introduction

The 1980 AEEP Distinguished Lecturer Tour offered a unique opportunity to gain impressions from many universities over a short period of time. While the visits to the ten participating universities were brief, the compact time frame of the lecture tour served to highlight contrasts and similarities among universities.

The observations offered here are intended to be objective assessments of conditions that seem to exist in environmental engineering education programs as the 1980's begin. The lecture tour provided a sample of adequate size to permit the suggestion that the observations apply somewhat generally to environmental engineering education. It would be inconsiderate to reward the hospitality enjoyed at each of the universities by publishing observations that could be interpreted as being critical of any particular program. The complete set of observations that follows applies to no single university included in the lecture tour. The anonymity of individual universities is, thus, assured.

Temporal Changes in the Quality of Academic Programs

A major observation is that preconceived notions of the quality of environmental engineering programs may be erroneous. Dramatic shifts in the quality of environmental engineering graduate programs are underway as a result of perturbations such as the discontinuation of federal training grants, changes in university funding capabilities, and gains or losses of faculty members. Some superb programs have developed at universities that are not generally considered to be leaders in environmental engineering education. They have critically assessed an oriented the capabilities of their faculties and facilities and are offering excellent educational opportunities. Environmental engineering programs are sufficiently small that substantial changes in quality can occur in a relatively short period of time. Reputations change far more slowly.

Effects of Funding Pressures on Academic Quality

Funding limitations and pressure to attract outside funding are adversely affecting the professional development of faculty members and the quality of educational programs. There would appear to be three facets to this problem. The first is that the quest for funds diverts the attention of some faculty from areas in which they have unique competence into areas of unique funding potential. In extreme cases, the nature of research to be accomplished with outside funds seems to be a consideration that is secondary to the basic goal of securing funds. A second aspect of the problem is that energy, resources, and talent are being expended on "research" that might more appropriately be accomplished outside the university environment. Rather routine projects are being sought in order to obtain the funds required to operate environmental engineering programs and satisfy administrators. The third effect is that some faculty members are assuming far more responsibilities than they can reasonably execute. The time drain associated with the pursuit of funds and execution of contractual commitments sometimes detracts severely from fulfillment of scholarly responsibilities. It would seem that greater real benefit to individual faculty members, educational programs, and the profession might result from a smaller quantity of work of higher quality.

The Educational Environment

While congeniality ordinarily does not enter into measures of academic excellence, perhaps it should. Impressive programs tend to be happy programs. The quality of some environmental engineering academic programs seems to be compromised by interpersonal relationships. Students, particularly at the graduate level, sense goodwill and excitement among faculty members and it becomes reflected in faculty-student and student-student relationships and in the quality of graduate education.

Laboratory Capabilities

Recent developments in laboratory instrumentation, interest in toxic substances, and differences in funding opportunities have broadened the range of laboratory capabilities of various environmental engineering programs. It would seem that the burden of funding, operating and maintaining modern laboratory instruments intensifies the need for workable institutional arrangements for cooperative use of expensive instruments.

(Continued overleaf)

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Academic Programs

One of the most notable differences between graduate level programs in environmental engineering in the beginning of the 1980's is in the composition of graduate student enrollment according to undergraduate degree. While some programs have maintained a student population consisting primarily of engineers, others include substantial numbers of students with undergraduate degrees in chemistry or biology. The major curriculum differences between the graduate programs at various universities concern entry and graduation requirements for students without engineering baccalaureates. Another notable curricular difference concerns the breadth of environmental engineering course work available or required. Different programs of comparable size have responded in opposite ways to the question of depth vs. breadth in environmental engineering education.

The Joy of Professoring

The most distressing observation from the lecture tour was that professoring just doesn't seem to be regarded as being as much fun as it used to be. The continuing burden of developing funding for graduate students, difficulties in attracting qualified graduate students to accept the limited funds, widening differentials between faculty salaries and those outside of academia, anticipation of further personal financial impacts from inflation, intensified pressures from university administrators, and limitations in supporting staff are detracting appreciably from the pleasures of professoring as the 1980's begin. The manner in which environmental engineering faculty members are able to cope with these frustrations and develop means to avoid or minimize them will do much to determine the course and quality of environmental engineering education in the 1980's.

DEADLINE FOR OCTOBER NEWSLETTER

Items to be included in the next issue of the NEWSLETTER should be received by the editors no later than Tuesday, September 2, 1980. Items of general interest to the profession should be submitted to:

J. F. Judkins, Jr. and J. M. Morgan
Co-Editors, AEEP NEWSLETTER
Department of Civil Engineering
Auburn University, Alabama 36849

CALL FOR PAPERS

The AWWA Research Committee is seeking papers on research work in the water supply field for presentation at the 1981 Annual Conference in St. Louis, MO, June 7-12. Four sessions have been requested by the committee for presentation of research papers.

Papers will be chosen from abstracts received by Friday, Nov. 28, 1980. All persons submitting abstracts will be notified by Jan. 30, 1981, as to whether or not their papers were selected. Research papers dealing with water quality control, distribution, management, and water resources are desired.

Eight copies of both an information sheet and a 300-1000 word abstract of the research paper should be submitted to E. F. Spitzer, AWWA, 6666 W. Quincy Ave., Denver, CO 80235. Abstract information sheets can be obtained from AWWA at the above address.

MEETINGS OF INTEREST

IIT Research Institute (IITRI) in conjunction with the Bureau of Mines will host the Seventh Mineral Waste Utilization Symposium on October 20-21, 1980 at the Institute.

The symposium is designed to provide information to industry on new developments in mineral waste utilization and waste reclamation.

Topics for the two-day event include: mining and mineral waste processing, industrial waste recovery, urban solid wastes, and scrap metal recovery.

Papers are being solicited from government agencies, trade associations, industrial organizations and research groups actively engaged in developing solutions to recycling resources.

Hardbound copies of the Proceedings for the first six symposia are available from IITRI.

For more information contact: Sy Bortz, Symposium Chairman, (312) 567-4400 or Marguerite Van Ness, Technical Coordinator, (312) 567-4224 at IIT Research Institute, 10 West 35th Street, Chicago, Illinois, or Roger DeCesare, (202) 634-1144, at the Bureau of Mines, Washington, D.C.

IAWPR

APPOINTMENT OF CHIEF EXECUTIVE

Applications are invited for the London-based post of Secretary-Treasurer of the International Association on Water Pollution Research.

The Association is an independent, non-governmental organization of 27 member countries world wide with the object to promote the advance and exchange of knowledge internationally in water pollution control and research.

The Secretary-Treasurer is the principal salaried officer and is responsible for the administration of the budget, the management of the head office, the membership services, the organization of conferences and the operation of publication agreements. Appropriate management experience in water science and technology and editorial work is desirable but not essential.

The organization is young with a small staff but it is expanding and the successful applicant is expected to make a career of the appointment. Commencing salary is negotiable around £15,000 sterling per annum.

Applications should be sent in writing to the Secretary-Treasurer, International Association on Water Pollution Research, Chichester House, 278 High Holborn, London WC1V 7HE, England, from whom further details are available on request.

The closing date for receipt of applications is 15th September, 1980.

ELEVENTH ANNUAL CONFERENCE

The 11th Conference of the International Association on Water Pollution Research will be held in Cape Town, Republic of South Africa, during 29 March-2 April 1982. The Conference invites research papers on all aspects of water pollution and its control. In addition to technical papers, workshops are planned on water recycling, developing countries, economics, technology transfer, oil pollution, and modeling.

Papers may be submitted anytime until 1 June 1981; proposals for poster presentations are due 1 August 1981. Many technical excursions, pre- and post-conference seminars, and pre- and post-conference tours have been planned. Contact Secretary-Treasurer, IAWPR, Chichester House, 278 High Holborn, London WC1V-7HE, England.

MICROPOLLUTANTS IN THE ENVIRONMENT

The Belgian National Committee to the International Association on Water Pollution Research announces a Specialized Conference on Micropollutants in the Environment to be held in Brussels, 22-25 November 1981. Topics include nature/origin of micropollutants; influence on surface and groundwaters and on vegetation; reuse of sludge and wastewater; and disinfection effects. Contact: Secretariat, Specialized IAWPR Conference, c/o Centre international de Conferences de Bruxelles, Parc des Expositions, B-1020 Brussels, Belgium.

CONTROL AND AUTOMATION IN WATER QUALITY MONITORING

The International Association of Water Pollution Research is sponsoring an international workshop on "Requirements, Application and Practical Experience of Control and Automation in Water Quality Monitoring;" it will be held in Munich 20-25 June 1981 and will continue in Rome 25-26 June 1981. The purpose of the workshop is to disseminate information on recent research, development and application in instrumentation, control of wastewater transport systems, industrial wastewater treatment and pretreatment and in sludge processing. Particular emphasis will be given to practical experience in control and automation leading to improvements in plant efficiency that delay the need for capital expenditure, produce better quality effluents and conserve energy. Contact Professor W. Bischofsberger, Technische Universitat Muchen, Arcisstrasse 21, 8000 Munchen 2, Republic of Germany. Send proposed abstracts by 1 September 1980 to Professor J. F. Andrews, Dept. of Environmental Engineering, Cullen College of Engineering, University of Houston, Houston, Texas 77004.

ACADEMIC MARKET PLACE

SCHOOL: University of Connecticut
POSITION: Assistant Professor of Civil Engineering
QUALIFICATIONS: B.S. and Ph.D. in Civil Engineering (Environmental, Geotechnical or Hydraulics)
RESPONSIBILITIES: Undergraduate and graduate teaching and research
APPLICATION DEADLINE: As soon as possible
CONTACT: Richard P. Long, Head
Civil Engineering Dept.
University of Connecticut
Box U-37
Storrs, CT 06268

SCHOOL: Georgia Institute of Technology
POSITION: Rank dependent upon qualifications (tenure track)
QUALIFICATIONS: Doctorate in engineering and strong background and practical experience in design, control and optimization of industrial and domestic water and wastewater treatment systems
RESPONSIBILITIES: Undergraduate and graduate teaching and research
APPLICATION DEADLINE: As soon as possible
CONTACT: Dr. J. E. Fitzgerald
Director
School of Civil Engineering
Georgia Institute of Technology
Atlanta, GA 30332

SCHOOL: Georgia Institute of Technology
POSITION: Rank dependent upon qualifications (tenure track)
QUALIFICATIONS: Doctorate in engineering and strong background in experimental investigation of physical/chemical water and wastewater treatment processes
RESPONSIBILITIES: Undergraduate and graduate teaching and research
APPLICATION DEADLINE: As soon as possible
CONTACT: Dr. J. E. Fitzgerald
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Atlanta, GA 30332

SCHOOL: Stanford University
POSITION: Assistant/Associate Professor of Civil Engineering (tenure track)
QUALIFICATIONS: Ph.D. and demonstrated competence (or potential) for teaching and research
RESPONSIBILITIES: Graduate teaching and research in physical/chemical treatment processes
APPLICATION DEADLINE: October 15, 1980
CONTACT: Prof. Perry L. McCarty
Standford University
Civil Engineering Dept.
Standford, CA 94305

SCHOOL: Utah State University
POSITION: Research Assistant/Associate Professor of Civil and Environmental Engineering
QUALIFICATIONS: Ph.D. in engineering and demonstrated teaching and research ability
RESPONSIBILITIES: Teaching and research
APPLICATION DEADLINE: As soon as possible
CONTACT: Dr. V. Dean Adams, Head
Division of Environmental Engineering, UMC 41
Utah State University
Logan, Utah 84322

ASSOCIATION OF ENVIRONMENTAL
ENGINEERING PROFESSORS
Attn: Dr. Michael J. Humenick
Dept. Civil Engineering
The University of Texas at Austin
Austin, Texas 78712

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*Environmental Engineering Unit Operations and Unit Processes Manual is available to members of AEEP for $6.00 a copy. Members may order additional copies at membership rate for their students.

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