

Division newsletter



American Society for Engineering Education

DIVISION: CIVIL ENGINEERING

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DEPARTMENT OF CIVIL ENGINEERING
WEST VIRGINIA UNIVERSITY

EDITOR'S CORNER

I hope you noticed the new format of your newsletter. This is only one of several changes I have made in hopes of making this publication not only more inviting to read but also more interesting; I would like to see the newsletter be more than just a "bulletin board" for the division.

In addition to providing a means for division officers and committees to communicate with the membership, the newsletter should provide its members with a "speaker's platform" - a place where you can voice your opinions on any aspect of our profession you choose and not be constrained by what some reviewer might think; an opportunity to react to the opinion of others; a chance to join into the conversation.

In an effort to increase interest in the newsletter and stimulate participation this issue carries the inaugural Guest Editorial. Plans are to invite individuals, who have distinguished themselves in the civil engineering profession, to write an article on the subject of their choice. The hope is that this editorial will stimulate some thought, be a topic of discussion for you and your colleagues, and provoke a reaction. I invite you to respond.

EDITOR'S CORNER CONTINUED

Beginning with the Fall '82 issue of the newsletter, a second new feature will be introduced: Reader's Speak Out. This will be your opportunity to reply to the guest editorials, to express your opinion on any issue you wish, or to offer suggestions to division officers or committees. I urge you to take advantage of this opportunity to "Speak Out". Send your comments to the editor.

Fred Beaufait
Editor

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CHAIRMAN'S REMARKS

Another Spring has arrived: final exams, summer, and the Annual ASEE Conference cannot be far away. This is the time to choose from the outstanding candidates for the Civil Engineering Division (the ballot is in this newsletter) and to begin making plans to attend the 1982 Annual Conference at Texas A & M. The Aggies tell us they are planning a great conference, and with a registration fee \$30 less than last years!

CHAIRMAN'S REMARKS CONTINUED

The full program and registration information for this June 21-26, 1982 conference with the theme "Productivity Through Engineering" should soon be in your hands. Our division's program is described elsewhere in this newsletter. You will find Jim McDonough and our committee chairmen have put together an excellent group of sessions.

At each annual conference, our division holds a planning session to put together the next year's conference program. This year's session takes on increased importance as many details of the 1983 overall Annual Conference program will be decided on Thursday of this year's Annual Conference, rather than at an October fall planning meeting. What topics do you want the 1983 Civil Engineering program to address? Please tell us.

Today, engineering education is facing many uncertainties and challenges. Changing patterns of national and state resource allocations seem to be with us, along with the decision in many states to have the customer (i.e. student) pay more of the expenses. Enrollment pressures, planning and control are continuing issues, as are the often discussed triad of future faculty availability and faculty compensation, issues relating to graduate study, and funds needed for equipment. Many branches of computer aided engineering are nearly exploding; how can we best prepare our students to effectively use these powerful tools? In many ways, the engineering colleges are "farm teams" for industry, including construction. How should the "major league industries" participate in engineering education? These are among the topics you may wish to discuss in our Annual Conference Monday night rap session, in our division publication, CIVIL ENGINEERING EDUCATION, or at next year's conference. Along the same lines, may I suggest for your reading the recent ASCE Task Committee on Engineering Education's report on Engineering Education to the Board of Directors

CHAIRMAN'S REMARKS CONTINUED

(January 1982 ASCE Issues in Engineering Education Journal). How will engineering education change over the next decade?

I hope to see many familiar and new faces of CE Division members at College Station in June!

Marvin Criswell
Chairman

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GUEST EDITORIAL

ACADEMIC ROULETTE

I want to thank your editor Fred Beaufait for inviting me to write the first guest editorial for the Civil Engineering Division Newsletter. I understand that Fred will call on many of you in the future to do the same. It's an excellent new idea and a pleasure to be given free rein to address any topic.

Of the many responsibilities I have in this position, one of the most enjoyable to me is attending the regional meetings of the Civil Engineering Department Chairmen. This is where the action is. This is where the buck stops even though the number of bucks leaves a lot to be desired these days. That is why the number one priority in my travel budget is to be sure to attend every regional meeting this fiscal year.

Among the myriad of topics discussed at the recent meetings, there is one topic that distresses me greatly. I would like to address that issue here. The topic is the problem of limiting civil engineering enrollment. . .

Now, we all know that for years most universities have limited the number of freshmen admitted. Some universities have an open admissions policy, I know, but the

GUEST EDITORIAL CONTINUED

Great screening devices called calculus, chemistry and physics usually brings along a sophomore class that should be able to go all the way through an engineering baccalaureate degree. We all understand these policies; have lived through them ourselves; and we have accepted them. It is a trial by fire albeit some schools reach a higher fahrenheit level than others. That's not what bothers me.

What bothers me is the limiting of enrollment at the entrance to the junior year when, essentially, a student starts a major program of study: in our case, civil engineering. From the departmental chairmen's meetings, I hear: "We won't admit anyone into CE this year unless he/she has a G.P.A. of 2.9 or above". The G.P.A. stated may vary but it's usually in that neighborhood and a high-class neighborhood it is, too.

Now, I know the reason for these limits. If no more operating funds are coming and no more faculty can be hired, the school is in a bind and their only solution is to say: "Stop--no more students!" This action keeps the teaching loads constant although not necessarily reasonable. That's the good news. The bad news concerns all those students doing satisfactory work who are now turned away. When I think of all the students between 2.00 and 2.90 who graduated from my departments over my 31 years of experience, I shudder to think of where they'd be if the roulette wheel stopped at 2.9 for them.

The trouble is the student never knows until the last quarter or semester of the sophomore year where the cutoff G.P.A. is going to be. If the department only takes the top 100 students and a student is the 101st, the game is lost. It's academic roulette pure and simple.

Solution? Well, I'll study harder and get better grades. Right? Wrong. Everyone else does the same and now the top 100 starts off at 3.0 and we're right back where

GUEST EDITORIAL CONTINUED

we started. In this game all the odds are in favor of the house (CE department).

What really bothers me is where all those discarded students are going. Are they lost to civil engineering? Do they go to business administration? Do they go to other schools? The answer to the last question is a partial yes. Enrollments at smaller schools have shown dramatic increases lately. However, if students are studying CE at the only state school in their state of residence, they are faced with the difficult financial problem of going to a private school or an out-of-state university. Not an easy choice at today's tuition costs.

To wrap this up, I can't discuss here all the aspects of the problem, but it is a problem--a difficult problem. If it comes to choosing sides here, I'm on the side of the students. The universities should expand their faculty rolls in order to take care of as many students as their facilities can handle. Students should be able to continue their studies in which two years have already been invested by them. In order to win at roulette one needs money--that's the bottom line.

George K. Wadlin

Editor's Note: Dr. Wadlin served on the faculty of the Department of Civil Engineering at the University of Maine, 1948 to 1969; was head of the department at Michigan Technological University, 1969 to 1978; and is currently with the national headquarters of ASCE serving as Director of Educational Services.

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REPORT FROM COMMITTEE #2
PROFESSIONAL PRACTICE AND RELATIONS
WITH TECHNICAL SOCIETIES

Planning for the two sessions being sponsored by the Committee at the annual conference in Texas is complete.

COMMITTEE #2 REPORT CONTINUED

"Improving Productivity Through People Engineering" is the title of the first session chaired by Donn Hancher. Co-sponsored by the Construction Division this session (#1217) will explore the improvement of productivity through the development of special engineering skills. Discussion topics are "Evaluating Employee Performance", "Productivity in Construction Projects", "Productivity in Design Officers", and "Group Brainstorming".

The second session, chaired by Don Leitch, will present recent changes in the examination procedures and registration requirements and will discuss the effects of these changes on the registration of professional engineers. Paper titles are "The New EIT Format --- Who Are the Casualties", "What You Should Know About Professional Registration" and "Registration of BSCEET Graduates?".

Committee members and guests are encouraged to attend the annual committee meeting on Wednesday, June 23, 1983. Replacements for two retiring committee members and session planning for the 1983 conference in Rochester will be on the agenda. Topics under consideration are teaching of professional ethics, roles of minorities in technical societies, technical writing for professional engineering and the role of the university in continuing education.

Don, Leitch, Chairman
University of Lowell

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REPORT FROM COMMITTEE #3
TEACHING METHODS AND TECHNICAL AREAS

Committee #3 will sponsor two sessions at the Annual Meeting this year. The first, Session #1617, is entitled "What's Happening With Computer-Aided Design in Civil Engineering Practice and Education".

COMMITTEE #3 REPORT CONTINUED

This program features speakers from practice as well as education. The second, Session #2217, is entitled "Computer Utilization in the Civil Engineering Program". This program will examine how computers are being incorporated into the Undergraduate Civil Engineering Program. The entire Division membership is invited to attend these sessions; they should prove to be interesting and valuable.

In order to arrange sessions for the 1983 Annual Meeting at RIT, I would like to request that any member of the Division, who has an idea for a session topic, contact me before June. The more input we receive, the better the session topics. All members are encouraged to attend Session #3117 which is the planning session for the 1983 Annual Meeting. Your input is desired and appreciated.

Gerald Seeley, Chairman
Tri-State University

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THE CANDIDATES

The report from the Nominating Committee was published in the fall issue of the CE Division Newsletter. The ballot for voting is found on the last page of this issue; you are urged to cast your vote and return your ballot today. It is important that you vote since there are two candidates for Vice-Chairman (Program Coordinator for 1983 Annual Meeting) and Director.

A short resume for each candidate follows:

James McDonough - William Thoms Professor of Civil and Environmental Engineering and Head of the department at the University of Cincinnati. Member of ASEE since 1965. Recipient of ASEE Dow Outstanding Young Educator Award and Western Electric Award for Outstanding Engineering Education.

CANDIDATES CONTINUED

ASEE Campus Activity Coordinator 1972-81; Chairman of North Central Section of ASEE, 1981. Advisor for Chi Epsilon, 1972-76, and Tau Beta Pi. Past Chairman of CE Division Committee #1 and Chairman of ASCE Cincinnati Section, 1981. Author of numerous articles.

Fred Beaufait - After serving on the faculty at Vanderbilt University for fourteen years, he assumed the duties of Chairman of the Department of Civil Engineering at West Virginia University, in 1979. Since joining ASEE in the early 60's, he has been active in the CE Division not only in the national organization but, until moving to West Virginia, in the Southeastern Section. He has served as Secretary-Treasurer (editor of CE Division Newsletter) since 1979, and has a long standing interest in engineering education; has served as Campus Activity Coordinator and was the first Assistant Dean for Engineering Education at Vanderbilt University. He has been active in ASCE and ACE as well as in ASEE. Authored two textbooks, edited several Proceedings and has had numerous papers published.

Ron Eck - an Associate Professor of Civil Engineering at West Virginia University. He received B.S.C.E. and Ph.D. degrees from Clemson University and is a Professional Engineer in West Virginia. He joined the faculty at WVU in 1975 and has been a member of ASEE since that time. His background and experience are in transportation engineering, specifically traffic engineering and highway safety. Ron has presented papers at ASEE Annual Conferences and has organized and moderated CE Division sessions at the 1979, 1980, 1981, and 1982 Annual Conferences. He is a past chairman of ASEE Civil Engineering Committee #3, Teaching Methods and Technical Areas, is a member of the Board of Directors of the CE Division, and was recently named as an Associate Editor of CIVIL ENGINEERING EDUCATION. He served as WVU's Campus Activity Coordinator from 1977-82 and

CANDIDATES CONTINUED

received the 1980 North Central Section ASEE Dow Outstanding Young Faculty Award. Ron is active in other professional society activities. He has been President of the West Virginia Section of ASCE (1980), serves on numerous Transportation Research Board (TRB) and Institute of Transportation Engineers (ITE) technical committees, and has published papers on a variety of transportation topics.

Paul King - Professor and Head of the Department of Civil Engineering and Engineering Mechanics at the University of Arizona. He received B.S. and M.S. degrees from California Institute of Technology and Ph.D. from Stanford University. He has served as sanitary engineer with the U.S. Public Health Service and with Brown and Caldwell Consulting Engineers. Dr. King was on the faculty for two years at the University of Kentucky and for thirteen years at Virginia Polytechnic Institute and State University. He was Charles P. Lunsford Professor of Civil Engineering at Virginia Tech from 1976 to 1979, prior to moving to Arizona to accept his present position. He has been active in research in water and wastewater treatment and is author or co-author of over 80 technical publications.

Gerald Seeley - Dean of Engineering, Tri-State University since 1978; Chairman of Civil Engineering Department, Tri-State University 1976-1978; Associate Professor, Tri-State University 1973-1976; Development Engineer, Honeywell 1966-1972; Development Engineer, Union Carbide 1963-1964. He received a B.S. in Mechanical Engineering, M.S. in Engineering Mechanics and M.S. in Civil Engineering and Ph.D. from the University of Minnesota. Dr. Seeley is a member of ASCE, ASEE, Sigma Xi, NSPE and the American Society of Engineering Management, and has various publications on inter-relations between humanities and technology.

CANDIDATES CONTINUED

Edward Osborne - A member of the Civil Engineering and Engineering Mechanics Faculty at the U.S. Air Force Academy since 1969; Head of the Department since 1981. Will be leaving the academy at the end of this academic year. He has been active in the CE Division for some years now, participating on Committee #1 and serving as an associate editor of CIVIL ENGINEERING EDUCATION; he is also a member of ASCE and ASME.

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CALL FOR PAPERS

CIVIL ENGINEERING EDUCATION

You are invited to submit an article or paper to CIVIL ENGINEERING EDUCATION. The next deadline for receipt of these is August 1, 1982. Papers should be typewritten and double spaced. Five copies are required. Titles should not exceed sixty characters including spaces. Maximum length of article is 3000 words, however in special cases this maximum will be waived. Illustrations should be submitted as black and white glossy photos or ink lined drawings. Keep in mind that illustrations may be reduced at least one-half. Footnotes and extensive bibliographic references are not generally desired. Articles on any and all aspects of Civil Engineering Education are most desired. Mail articles and address inquires to:

Peter G. Hoadley, Editor
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Environmental Engineering
Box 1602; Station B
Vanderbilt University
Nashville, Tennessee 37235
Telephone No. 615/322-3518 or 3396

* * THE CALENDAR * *

May 7, 1982

Middle Atlantic Section
Princeton, N.J.

June 18-19, 1982

Department Heads Institute
Texas A & M University

June 21-14, 1982

Annual Conference
Texas A & M University

October 7-9, 1982

St. Lawrence Section
Rochester Institute of Technology

October 8-9, 1982

New England Section
Waterbury State Technical College

October 11-12, 1982

North Midwest Section
University of Iowa

October 18-19, 1982

ASEE/IEEE Frontiers in Education
University of South Carolina

November 6, 1982

Middle Atlantic Section
Drexel University

November * *

Pacific Southwest Section
Pasadena, California

1982 ASEE ANNUAL CONFERENCE
TEXAS A & M

CE Division Events

The program of the Civil Engineering Division is a full one. It is earnestly hoped that these events will be well attended, along with the co-sponsored events, by CE Division members. You should especially make plans to attend the planning session for next year's conference on Wednesday morning (Event #3117) and the Division Banquet scheduled for Tuesday evening (Event #2717). You are also welcome to the Chi Epsilon Luncheon set for noon on Wednesday (Event #3417) and the CE Division Luncheon on Tuesday (Event #2417). By attending and participating in this year's meeting you can have input into next year's program.

Monday, June 21, 1982

8:00 - 9:45 a.m. (Event #1217)	IMPROVING PRODUCTIVITY THROUGH PEOPLE ENGINEERING
3:45 - 5:30 p.m. (Event #1617)	WHAT'S HAPPENING WITH COMPUTER- AIDED DESIGN IN CIVIL ENGINEERING PRACTICE AND EDUCATION
8:00 - 10:00 p.m. (Event #1817)	CIVIL ENGINEERING RAP SESSION

Tuesday, June 22, 1982

8:00 - 9:45 a.m. (Event #2217)	COMPUTER UTILIZATION IN THE CIVIL ENGINEERING PROGRAM
*12:00 - 1:30 p.m. (Event #2417)	CE DIVISION BUSINESS LUNCHEON
1:45 - 3:30 p.m. (Event #2517)	MANAGEMENT OF ENGINEERING ENROLLMENT
*5:00 - 9:00 p.m. (Event #2717)	CE DIVISION BANQUET

Wednesday, June 23, 1982

*7:00 - 9:45 a.m. (Event #3117)	CE PLANNING SESSION
*12:00 - 1:30 p.m. (Event #3417)	CHI EPSILON LUNCHEON
1:45 - 3:30 p.m. (Event #3517)	WHAT'S NEW IN PROFESSIONAL REGISTRATION
3:45 - 5:30 p.m. (Event #3617)	EDUCATION POLICIES FOR PRODUCTIVITY

