

# Division newsletter



American Society for Engineering Education

DIVISION: Civil Engineering

EDITOR: Fred W. Beaufait  
Department of Civil Engineering  
West Virginia University  
Morgantown, WV 26506

DATE: April 29, 1981

### CHAIRMAN'S REMARKS

I want to begin these remarks by thanking all the officers of the CE Division for their excellent work during the year in organizing the annual conference program, particularly Program Chairman, Marvin Criswell and Committee Chairmen, Colby Ardis, Subhash Anand, and Ronald Eck. The efforts of all members are greatly appreciated because their contribution ensures the continuing success of the CE Division.

To continue the growth of the CE Division and its concern for engineering education requires the participation of all members, (approximately 1250 as of July 1980). Active participation starts at the local college campus and sectional meetings of ASEE. Even if you cannot attend this year's annual conference you can have valuable input to the planning for the 1982 CE Division programs by communicating your ideas to the officers and committee chairmen prior to the planning session at this year's annual conference. Also you can encourage your associates to join ASEE because many issues important to civil engineering education will be decided in the near future. A concerted resolution will be needed on the future of laboratories, cost of new and updated equipment, retention of faculty, and generating interest of young engineers in engineering education as a career.

The twice yearly publication of Civil Engineering Education provides another opportunity for individual contribution by writing articles for the journal based on your experience as a practicing engineer, educator, or both.

Civil Engineering Education has the support of the EDEX Committee of ASCE and the George Wadlin, Education Services Director of ASCE. Peter Hoadley has made a great contribution to the CE Division as "founder" and editor of the journal. The members of the CE Division have an important responsibility to enhance the values of the journal to the civil engineering profession.

In essence, the value derived from association with ASEE and the CE Division depends to a large extent on your participation. No "input", no "output".

The officers of the CE Division look forward to seeing as many members as possible at the annual conference. However, if you cannot attend this year, remember that the conference is held at different colleges each year and there

will be times when the conference will be within reasonable travel time and cost for you.

Gordon Batson  
Chairman, Civil Engineering Division, ASEE  
Clarkson College

\* \* \* \* \*

C.E. DIVISION PERSPECTIVE OF 1981 ASEE ANNUAL MEETING

"Education and Industry - A Joint Endeavor" is the theme of both this year's ASEE Annual Conference and the CE Division program sessions we have planned. Engineering education in the 1980s will be tied to the actions and cooperation of industry in many ways, including joint efforts to update laboratory and computing equipment, use of industry adjuncts and advisory committees in education, continuing education in industry, industry efforts to promote Engineering Education to funding agencies, governing boards and the public; and competition for potential graduate students and advanced degree holders (i.e. potential faculty).

Los Angeles is one of those cities in the air fare "wars" which can be quite inexpensive to get to if you plan early and happen to live in the right place. Because the University of Southern California has a lot of commuter students, on-campus housing and meal facilities are limited; you may wish to also get housing requests in early. Please preregister for meal events - the Divisions have been told that we will purchase any unsold meal tickets and at this year's "improved" prices, so there probably will be few or no tickets for the CE Division meal events available after you arrive at USC.

From the outline of the CE Division program listed below, you can see that (thanks to the excellent work of the committee chairmen and their session moderators) a full slate of events is in store for those of you who get to Southern California. Many topics which are not included but interest you can fit into Monday night's rap session or into the 1982 program. Since next year's CE Division program is largely planned at the Wednesday morning session, it is important that the Division committees and members bring good ideas to the planning session. "Productivity through Engineering" is the 1982 theme. Hope to see you in June at USC.

Marvin Criswell  
Colorado State University

\* \* \* \* \*

CIVIL ENGINEERING DIVISION PROGRAM  
1981 ANNUAL ASEE MEETING  
University of Southern California

Monday, 22 June 1981

\*1217                    8:00-9:45 a.m.                    EFFECTIVE USE OF ADJUNCT FACULTY  
                         Moderator:                                    Colby V. Ardis, Jr.

Presentations and a panel discussion on seeking creative ways to effectively use adjunct faculty in a College of Engineering.

- \*1326 10:00-11:45 a.m. ENGINEERING LABORATORIES -- ARE THEY GOING  
DOWN THE TUBE? (Miniplenary)  
Moderator: Klaus D. Timmerhaus

Past underfunding of engineering laboratories, coupled with present record enrollments has visibly highlighted the serious deterioration of such laboratories. This mini-pleinary examines the present state of engineering laboratories, reassesses the value of laboratories to engineering education, emphasizes ways and means that such laboratory work can be rewarding and considers how laboratories might be maintained under today's budgetary constraints.

- \*1617 3:45-5:30 p.m. INGREDIENTS THAT CHARACTERIZE DESIGN COURSE  
Moderator: Ronald Eck

Faculty, practitioner and ABET accreditation team member viewpoints on what ingredients should be included in design courses, along with what a design course is and should accomplish, will be presented by representatives from these groups.

- \*1817 8:00-10:00 p.m. CIVIL ENGINEERING DIVISION RAP SESSION  
Moderator: Gordon Batson

Discussion of various topics of concern to C.E. division members in an informal rap session format.

Tuesday, June 23

- \*2217 8:00-9:45 a.m. INDUSTRIAL ADVISORY BOARDS TO COLLEGES OF  
ENGINEERING - THEIR FUNCTION AND PURPOSE  
Moderator: Subhash C. Anand

Industrial advisory boards have occasionally been utilized by the colleges of engineering in helping them formulate and maintain a relevant curriculum. Recently, however, the engineering colleges have discovered additional ways the advisory boards can be very useful. Two university administrators and advisory board members present their views.

- \*2417 12:00-1:30 p.m. CE DIVISION BUSINESS LUNCHEON  
Moderator: Gordon Batson

- \*2522 1:45-3:30 p.m. COMPUTERS IN CONSTRUCTION MANAGEMENT  
Moderator: V. L. Hastings

The utilization of computers, especially small computers and on-line systems, has dramatically changed the management operations in industry. This session will cover the utilization of computers in construction management.

- \*2617 3:45-5:30 p.m. PAST, PRESENT AND FUTURE OF CIVIL ENGINEERING  
LABORATORIES  
Moderator: Gerald Seeley

Civil engineering laboratories and classes using them are increasingly facing the problems of large class size, lack of adequate and modern

equipment, faculty shortages and administrative allocation - algorithms unfavorable to labs. The current status of labs will be surveyed and innovated approaches to meeting future student and employer needs are examined.

\*2717                    6:30-9:30 p.m.            CE DIVISION BANQUET  
                         Moderator:                    Gordon Batson  
                         Speaker:                     "The Other Side of Engineering"  
                                                            Michael J. Nosanov  
                                                            Department of Water and Power  
                                                            City of Los Angeles

This annual Civil Engineering Division banquet event includes recognition of new C.E. Division officers and a speaker. Guests are welcome.

Wednesday, June 24

\*3117                    7:00-9:45 a.m.            CE PLANNING SESSION  
                         Moderator:                    Marvin Criswell

Planning session for next year's Civil Engineering Division events and activities, division subcommittee meetings, and formulation of program plans for the 1982 Annual Conference sessions on the theme "Productivity through Engineering".

\*3317                    10:00-11:45 a.m.        THE FACULTY CRISES IN ENGINEERING, WHAT IS  
                                                            BEING DONE TO COMBAT IT (Miniplenary)  
                         Moderator:                    David Ullman

Engineering education is facing a crisis in the development of new engineering faculty and the retention of current faculty. Action to combat this trend is being developed on the national and individual institutional levels. This mini-plenary will report on the crisis and current techniques for dealing with it.

\*3417                    12:00-1:45 p.m.        CHI EPSILON LUNCHEON  
                         Moderator:                    Dexter Jameson  
                         Speaker:                     "The Role of the Engineering Honor Societies  
                                                            in the Engineering Profession"  
                                                            Donald Bender

Luncheon for Chi Epsilon Civil Engineering Honor Society members and guests. Short report of National Chi Epsilon activities.

\*3517                    1:45-3:30 p.m.            UNIVERSITY-INDUSTRY JOINT ENDEAVORS IN  
                                                            ENGINEERING EDUCATION  
                         Moderator:                    Donald Leitch

University and industry have joined together in exciting ways to enhance professional education. Techniques used to directly involve engineering firms in the education of civil engineering and construction students will be presented. Discussion of these and other joint endeavors will follow the formal papers.

- \*3548           1:45-3:30 p.m.           ENVIRONMENTAL ENGINEERING AT THE UNDERGRADUATE  
LEVEL  
Moderator:           Joseph Willis
  
- \*3660           3:45-5:30 p.m.           HOW DO YOU DEAL WITH INCREASED ENROLLMENT AND  
LIMITED LAB FACILITIES  
Moderator:           Roy Bourgault

Discussion of experiences with large lab and design classes. How to give students the necessary exposure while dealing with large student numbers.

+ + + + +

The Civil Engineering Division of ASEE has put together a very full program for the 21-25 June 1981 Conference to be held on the USC campus in Los Angeles, a program which you should find interesting and very relevant to C.E. Education in the 1980s. The conference theme is "Education and Industry, A Joint Endeavor". We hope that many of you C.E. Division members will be out on the USC campus the fourth week of June and can attend these C.E. Division sponsored and co-sponsored events.

The Wednesday morning planning session is a very important meeting; the 1982 program is largely planned at this time. All members interested in the 1982 program; including C.E. Division officers and committee members are urged to attend. The C.E. RAP SESSION on Monday evening is your opportunity to gather with old friends and meet new members -- a must for all members. And don't forget the BUSINESS LUNCHEON and the BANQUET on Tuesday and the CHI EPSILON LUNCHEON on Wednesday.

Participate in your Division program.

\* \* \* \* \*

FIRE ENGINEERING

What common idea would connect a professor of civil engineering at Manhattan College and a deputy chief of the New York City Fire Department? The answer - Fire Engineering, developed by Manhattan College's civil engineering department with the assistance of Deputy Chief Vincent Dunn of the New York City Fire Department. Its purpose is to acquaint the engineering student with the problems of designing fire-safe structures and how to deal with collapse of fire-weakened structures. These are the two major topics to be addressed.

According to Professor Robert Spinna, P.E., chairman of the Manhattan College civil engineering department, "the consequences of structural fires are all too familiar to all of us. Fire services throughout the country are struggling to meet the challenges posed by the epidemic of fires striking older buildings and the special problems of modern construction. By reaching the engineer in the design stage, it is hoped that buildings can be constructed of maximum fire resistance and, more importantly, the fire hazard to the occupants and fire-fighters will be minimized."

Plans are underway to expand the Fire Engineering Program to the graduate level by the fall of 1982.

For more information and registration times contact Professor Robert Spinna at Manhattan College, N.Y., phone (212) 920-0171.

---

CALL FOR PAPERS

The sixth issue of CIVIL ENGINEERING EDUCATION will be published during the fall of 1981. This is a call for articles and papers on any and all aspects of civil engineering education. Guidelines for preparation of a manuscript are found on the inside front cover of the last issue. Deadline for the receipt of manuscripts is August 1, 1981. Mail articles and address inquires to Peter G. Hoadley, Dept. of Civil & Environmental Engineering, Vanderbilt University, Box 1602, Station B, Nashville, TN 37235.

---

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

Committee #2 is very pleased to sponsor two sessions at the ASEE Annual Conference to be held at USC, Los Angeles, that should be of great interest to all civil engineering educators and practitioners. The first session, entitled "Industrial Advisory Boards to Colleges of Engineering - Their Function and Purpose," has three outstanding speakers who will describe how the colleges of engineering have found interesting ways to utilize the services of the advisory boards. The speakers are C. Roland Haden, Dean of Engineering at Arizona State University; David Novick, Vice-President, Lester B. Knight & Associates, Chicago; and Donald L. Bender, Assoc. Dean of Engineering at Washington State University. The second session is entitled "University - Industry Joint Endeavors in Engineering Education," and discusses the techniques used to directly involve engineering firms in the education of civil engineering and construction engineering students. The speakers for this session also possess outstanding credentials and are Dale Jellison, H.E. Sargent, Inc., and George W. Greenwood, University of Maine; Blaine Vogen, California State Polytechnic University - Pomona; Lawrence J. Levy, Long Beach Naval Shipyard, and Donn E. Hancher, Purdue University. Both sessions are being co-sponsored by Construction Engineering Committee.

Committee #2 is also interested in recruiting new members, and invites you to attend the Committee meeting on Wednesday morning the 24th of June during the CE Division's breakfast and planning session. See you there!

SubhashC. Anand  
Clemson University

\* \* \* \* \*

REPORT FROM COMMITTEE #3 -- TEACHING  
METHODS AND TECHNICAL AREAS

Committee #3 is pleased to present two sessions at the Annual Conference at USC. The first session, "Ingredients That Characterize A Design Course",

deals with a subject that often generates differences of opinion between educators and practitioners. Several educators will present their viewpoints followed by the remarks of a distinguished practitioner. A look at the "Past, Present and Future of Civil Engineering Laboratories" is the topic of the second session. A number of timely topics will be addressed in this session including results of a recent survey of CE lab education in the United States.

The Teaching Methods and Technical Areas Committee serves as a channel for promoting and conducting meetings and discussions on teaching methods and the teaching of technical subjects. If you would like to contribute to our efforts, please contact Ron Eck at 304-293-5580 or write him at West Virginia University. Better yet, plan on attending our planning session on the morning of Wednesday June 24, 1981. We need your ideas and thoughts on session topics and speakers for the 1982 conference at Texas A&M.

Hope to see you in Los Angeles!

Ron Eck  
West Virginia University

\* \* \* \* \*

THE CANDIDATES

The report from the Nominating Committee was published in the full issue of the C.E. 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 and Director.

A short resume for each candidate follows:

Marvin Criswell

Associate Professor of Civil Engineering, Colorado State University, Fort Collins, and ASEE member since 1971. Current ASEE Civil Engineering Division Program Chairman (Division Vice-Chairman), and past Committee 3 (Professional Practice and Relations with Technical Societies) chairman, CE Division Director, and Civil Engineering Education Associate Editor. Currently an ASEE Campus Activity Coordinator, past member of ASEE Campus Liaison Board. Zone IV Outstanding Campus Activity Award winner (1976) and Rocky Mountain Section Dow Award recipient (1978). Also active in several ASCE and ACI technical committees, member of ASTM, and a P.E. (Colorado).

James McDonough

William Thoms Professor of Civil and Environmental Engineering and Head of the Department of Civil and Environmental Engineering, University of Cincinnati. Member of ASEE since 1965. Recipient of ASEE Dow Outstanding Young Educator Award and Western Electric Award for Outstanding engineering education. Member and later Chairman of ASEE-NEE Committee 1972-1978. Chi Epsilon Advisor 1972-1976. Campus Activity Coordinator 1972-1981. Chairman North Central Section ASEE 1981. Faculty Advisor Tau Beta Pi. Past Chairman of Civil Engineering Division Committee #1 ASEE. Chairman ASCE Cincinnati Section, 1981. Author of numerous articles and publications.

Gajanan Sabnis

Dr. Gajanan M. Sabnis is one of the principals of the firm of Sheladis Associates, Inc. (SAI), Riverdale, Maryland, and also Professor of Civil Engineering at Howard University. He has been active in the civil engineering division of ASEE and is a former chairman of the division committees of Professional Activities and Technical Society Liaison. He is the author of two books, "Handbook of Composite Construction Engineering (Van Nostrand) and "Structural Modeling and Experimental Techniques" with co-authors, Harns, White and Mirza (Prentice Hall). In addition, he has written over fifty technical publications. Along with his active participation in ASEE, he serves on several committees of ACI, ASCE and SESA.

Subhash Anand

Professor of Civil Engineering, Clemson University. Member of ASEE since 1968. Member Committee #2 CE Division, ASEE, since 1977, Chairman 1979-80, 1980-81. Interested in Civil Engineering Design Education. Directed a NSF supported Summer Institute in Structural Design for College Faculty in 1972. Speaker at ASEE Annual Conferences in 1973, 76, and 77, and moderator in 1979 and 1980. Published papers in Proceedings of the 5th Annual Frontiers in Education Conference, Atlanta, 1975, and ASCE Civil Engineering Education Conferences held at Ohio State University, 1974, and University of Wisconsin-Madison, 1979. Active in ASCE and has published widely.

Colby V. Ardis, Jr.

Professor and Chairman of the Civil Engineering Department, The University of Toledo, Toledo, Ohio since July, 1979. Has three degrees from the University of Wisconsin and is a registered Professional Engineer in Wisconsin and Ohio. Dr. Ardis had 20 years of professional practice experience before joining The University of Toledo, the last twelve were with the Tennessee Valley Authority where he also taught part-time at the University of Tennessee. Prior to TVA he was with Wisconsin-Michigan Power Company for six years and taught engineering part-time in the evenings for The University of Wisconsin. He also worked for the University of Wisconsin for a year in Continuing Education. Dr. Ardis has been very active in his profession and his community receiving numerous awards from the Wisconsin Society of Professional Engineers, Technical Society of Knoxville, Knoxville YMCA, Knights of Columbus, National Management Association and Toastmaster's International. Dr. Ardis is the author of 20 water resources development related publications and three chapters in two textbooks.



\* \* \* \* \*

ASEE BALLOT - C.E. DIVISION

OFFICERS FOR 1981-82, PLACE AN X IN THE APPROPRIATE ( ).

Chairman: Marvin Criswell ( )

---

VOTE FOR ONE

Vice-Chairman: Jim McDonough ( )  
Gajanan Sabnis ( )

Director: Subhash Anand ( )  
Colby Ardis ( )

RETURN BALLOT BY JUNE 1, 1981 TO:

Fred Beaufait  
Department of Civil Engineering  
West Virginia University  
Morgantown, WV 26506