

# the news



PHILADELPHIA SECTION  
**AMERICAN SOCIETY OF CIVIL ENGINEERS**  
1317 Spruce Street, Philadelphia, Pa. 19107

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OUR 69th YEAR

February, 1982

Philadelphia Section, American Society of Civil Engineers

## **FEBRUARY DINNER MEETING TUESDAY, FEBRUARY 9, 1982**

Engineers' Club, 1317 Spruce Street, Philadelphia  
Cocktails — 5:30 P.M.    Dinner — 6:30 P.M.    Meeting — 7:30 P.M.

**SUBJECT:**

**"COMPUTERS AND THE CIVIL ENGINEER"**

**SPEAKER:**

**BRUCE W. MADDOCK**, Marketing Manager, Scientific Processing, Major Systems, Worldwide Marketing, Sperry Univac Corp., Blue Bell, PA

**SPECIAL FEATURE:**

**SWARTHMORE COLLEGE, UNIVERSITY OF DELAWARE AND  
PRINCETON UNIVERSITY NIGHT**

The ASCE Student Chapters, Faculty and Alumni of the Civil Engineering Departments of Swarthmore College, University of Delaware and Princeton University will be honored at this meeting. All students, faculty and alumni are cordially invited to attend.

## **MARCH DINNER MEETING TUESDAY, MARCH 9, 1982**

Engineers' Club, 1317 Spruce Street, Philadelphia  
Cocktails — 5:30 P.M.    Dinner — 6:30 P.M.    Meeting — 7:30 P.M.

**SUBJECT:**

**THE INTERSTATE SUCCESS STORY**  
(Highway Planning in the City of Baltimore)

**SPEAKER:**

**WILLIAM K. HELLMAN, P.E.**, Mayor's Transportation Coordinator

The successful implementation of a planned highway system depends upon the acceptance of the plan by and the cooperation of the social and business community.

By use of a multimedia presentation including tape and sixteen (16!) slide projectors, Mr. Hellman will describe the highway planning process used in gaining the acceptance of the community for the proposed plans.

**SPECIAL EVENT:**

**PRESENTATION OF LIFE MEMBERSHIP CERTIFICATES**

**SPECIAL FEATURE:**

**UNIVERSITY OF PENNSYLVANIA NIGHT**

The ASCE Student Chapter, Faculty and Alumni of the Civil and Urban Engineering Department of the University of Pennsylvania will be honored at this meeting. All students, faculty and alumni are cordially invited to attend.

Please call Mr. deKovacs at the Engineers' Club immediately (215 735-5234), for reservations.

**STUDENTS** — Plan to attend for Dinner (Half Price) or meeting after Dinner.

## **TECHNICAL GROUP ACTIVITIES**

### **Geotechnical**

#### **February Meeting**

Date: **Tuesday, February 16, 1982**  
Engineers' Club — 7:00 p.m.

Subject: **Hydrogeologic Aspects of  
Hazardous Waste Disposal**

Speaker: **John B. Robertson**, Chief, Office of Hazardous Waste Hydrology, U. S. Geological Survey, Water Resources Division, Reston, Virginia

Program Host: **Dr. Ziyad I. Husami**, Chairman, Geotechnical Group

#### **March Meeting**

Date: **Tuesday, March 16, 1982**  
Engineers' Club — 7:00 p.m.

Subject: **Slurry Trench Cut-off Walls  
for Hazardous Waste Isolation**

Speaker: **Dr. D. D'Appolonia**, President Engineered Construction, Inc. Pittsburgh, PA

Program Host: **Dr. Ziyad I. Husami**, Chairman, Geotechnical Group

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### **Hydraulics and Sanitary**

#### **March Meeting**

Date: **Wednesday, March 24, 1982**

**Luncheon 12:30 p.m.—Engineers' Club  
Meeting 1:00 p.m.**

Subject: **Laboratory Modeling  
of Hydraulic Structures**

Speaker: **Dr. George Hecker**, Director Aiden Research Laboratory of Worcester Polytechnic Institute

Program Host: **Dana R. Pizarro**, Chairman, Hydraulics and Sanitary

Many hydraulic problems are too complex to use conventional analysis. Consequently, many problems are studied using models to develop or check a basis of design.

(continued on page 2)

## IMPORTANT!! 1981 - 1982 Meeting Notices

**Tuesday, April 13, 1982 — Joint Dinner Meeting with Philadelphia Post, Society of American Military Engineers (SAME), Engineers' Club**  
 Subject: "Construction of Trident Submarine Base, Puget Sound"  
 Speaker: Capt. William G. Connor, USN, Officer in Charge  
 Widener College and Spring Garden College Night

**Saturday, May 1, 1982 — Annual Spring Social**  
 Engineers' Club, Philadelphia, PA

### TECHNICAL GROUP ACTIVITIES (continued from page 1)

Dr. Hecker will discuss the modeling capabilities of the Alden Research Lab. Particular topics include previous model studies of clarifiers and pump intakes.

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### Transportation and Urban Development and Structural/Construction March Joint Meeting

Date: **Wednesday, March 17, 1982**  
 Engineers' Club—Cocktails 5:30 p.m.  
 Dinner 6:30 p.m.—Meeting 7:30 p.m.  
 Subject: **State-of-the-Art—Segmental Bridges**

Speaker: **Dr. Walter Podolny**, Federal Highway Administration, Bridge Division, U.S. Dept. of Transportation, Washington, DC

Program Hosts: **David Novick**, Chairman, T & UD Group  
**James Robinson**, Chairman, Structural/Construction Group

For dinner reservations please contact Anne Marie Collins at (Mr. Novick's office) (215) 988-0696 Ext. 15.

### T & UD GROUP SEEKS MEMBERS

The Philadelphia Section Transportation and Urban Development Group Chairman, **David Novick**, would like to develop a current list of Members desiring to be affiliated with the Group

If you are interested in being active and receiving information pertaining to the T & UD Group, please contact Anne Marie Collins at (Mr. Novick's office) (215) 988-0696 Ext. 15.

### ITEMS OF INTEREST

#### Penn's Student Chapter Flies a Kite

At the inauguration of Dr. Sheldon Hackney as President of the University of Pennsylvania last Fall, the many events included a kite flying contest. The first kite to make it up was built for the Univ. of PA, ASCE Student

Chapter by Civil Engineering Students **John A. Brubaker** and **Brent N. Senseny**.

Who said C.E.'s don't learn professional and highly technological skills!!!

#### PRIME Honored

As part of the same inaugural festivities at Penn, the Philadelphia Regional Introduction for Minorities to Engineering (PRIME) entry won the prize for "the most comprehensive community involvement".

Under the Chairmanship of **Dr. Richard E. Woodring**, Dean of the College of Engineering, Drexel University, PRIME is a Special Tasks Division of the Philadelphia Section ASCE.

The Section's highest praise is extended to Dr. Woodring and PRIME for the award and for their fine work.

### BAXTER IN HOSPITAL

Former National ASCE President and the Philadelphia Section's distinguished Past President **Samuel S. Baxter** is a patient at Methodist Hospital, Philadelphia, following major surgery recently.

Phila. Section members who wish to send cards or notes may address them to Sam, c/o Methodist Hospital, 2301 S. Broad Street, Phila., PA 19148, Room No. 126.

### ASCE REGISTER AVAILABLE

District 4 National Director **Chuck Pennoni** advises the Philadelphia Section Membership that copies of the **1982 Official ASCE National Register**, now in print, will soon be available, free of charge, to members who request them.

Address requests to **Carl Nelson**, Director, Field Services, ASCE, 345 E. 47th St., New York, NY 10017

Watch for a Special Treat  
 in Next Month's Issue

"WHAT THEY SAID —  
 WHAT THEY MEANT"

### ACI SEMINAR ON PARKING STRUCTURES

The Delaware Valley Chapter, American Concrete Institute and the Philadelphia Section, ASCE, are cosponsors of a Seminar on Concrete Parking Structures, to be held on **Wednesday, February 17, 1982**, at the Philadelphia Marriott Hotel, City Avenue and Monument Road, Philadelphia.

This is a problem-solving seminar to guide participants through the various stages of design, construction, maintenance and repair of concrete parking structures. A panel of experts will advise as to the causes and prevention of problems uniquely related to these structures.

For full particulars and reservation information please contact **Michael Boyle** Secretary of ACI, at (215) 688-8517.

### PHILA. SECTION, ASCE OFFICERS 1981 - 1982

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**COPY DEADLINE FOR  
 MARCH, 1982 ISSUE  
 FEBRUARY 15, 1982**

## JANUARY MEETING

**Editor's Note:** THE NEWS is grateful to **Dana R. Pizzaro**, Chairman of the Section's Hydraulics and Sanitary Group, and competent Program Host at the January 12, 1982 Section Meeting, for his assistance in the following writeup.

The Philadelphia Section, ASCE and its Women's Auxiliary enjoyed their Annual Joint Dinner Meeting on January 12, 1982 at the Engineers' Club. Presiding was Vice President Bernard M. McNamee, who substituted admirably for President Frederic Roll, not yet returned from his sojourn in England. The principal speaker was **Gary R. Galida**, Chief, Division of Hazardous Waste, Bureau of Solid Waste Management, Department of Environmental Resources, Commonwealth of Pennsylvania. Mr. Galida's topic was: "**Hazardous Waste Management.**"

The presence of the Women's Auxiliary at the Joint Meeting always brightens the evening, and this was no exception. President **Paula (Mrs. Robert M.) Koerner** led the Auxiliary's delegation.

### Drexel Night

The ASCE Student Chapter and Civil Engineering Department of Drexel University were the featured college of the meeting, and they turned out in force - some sixty strong. ASCE Student Chapter Faculty Advisor, **Dr. Gene Parkin** introduced Civil Engineering faculty in attendance. **Dr. Richard E. Woodring**, Dean of the Drexel College of Engineering and active Phila. Section member (as is Dr. Parkin) described the growth of the College - it boasts of a student body of 3,000 undergraduates in all categories, and 600 graduate students. Happily, applications for next year are up 10%. Computer Science and Electrical Engineering are the most popular courses being pursued. It is Dr. Woodring's objective to integrate the burgeoning computer technology with engineering design techniques and into total building systems, mainly at the Master Degree level.

Drexel is in constant search for the best faculty in engineering, advised Dr. Woodring. The effort has been successful, particularly in the field of acoustic ultra-sonics research in many branches of engineering. Drexel's aim is to stimulate interaction between the University and Industry in the new provinces of research. Dean Woodring is pleased to report that fund-raising for a new Engineering Building is under way. ". . . the place is jumpin' . . ." he proclaims jubilantly.

### Student Chapter Very Active

Student Chapter Pres. **Frank Adams** thanked the Section for its invitation and courtesies. He introduced fellow officers, members and alumni in attendance, including Membership Secretary **Joe DePascale**, and Recording Secretary **Frank McVeigh**. Messrs. Adams and DePascale were guests of the Board of Directors at its meeting preceding the Main Section Meeting. Frank summarized recent accomplishments of the Chapter, and proudly pointed to the many awards Drexel Chapter members have received in various Student Paper Competitions during the year. In the athletic department, the Drexel ASCE women outperformed the men by a "mile" at the Annual Concrete Canoe Race which was hosted by Drexel last Spring—winning their race, while the search crew is still looking for the men's canoe and crew along the Schuylkill River!

President Adams described senior seminars cosponsored by the Drexel ASCE Student Chapter and leading industrial companies who participate in the renowned Drexel Cooperative Education Program in Civil Engineering. In highly commendable community activity, the Chapter sponsors an annual Christmas party for underprivileged children of the campus area.

Student Chapter meetings scheduled for the near future include: an expert from Exxon Corp., who will discuss ideas for solutions of energy problems of the future; a field trip to the Limerick Nuclear Power Plant; and a film on the Brooklyn Bridge history and construction, recently released by National ASCE.

### Past Presidents Honored

Another highlight of the Section Meeting was the awarding of special ASCE pins to Section Past Presidents **Wilt M. Heiser** (1976-77), and **Joseph R. Synchron** (1980-81). The presentations were made by Past President **Robert M. Koerner** (1975-76) in eloquent tribute to these outstanding, dedicated gentlemen. The recipients acknowledged the awards in modest, appreciative responses.

### The Challenges of Hazardous Waste

Hydraulics and Sanitary Group Chairman **Dana R. Pizzaro** introduced the principal speaker of the evening, **Gary R. Galida**, the official of Pennsylvania's Department of Environmental Resources, on the subject: "**Hazardous Waste Management.**" Speaking on a very difficult — though important and timely — subject, Mr. Galida immediately won the audience with his subtle wit,

disarming charm and candor. Not least of his qualities is a clear, articulate and meaningful style of speaking, unfettered by technical jargon and evasiveness.

### Program Overview

Mr. Galida pointed out that the Commonwealth of Pennsylvania is the fourth largest generator of hazardous waste in the Nation. The handling of these hazardous wastes is dictated by the Resource Conservation and Recovery Act (RCRA), a national program under Environmental Protection Agency (EPA) jurisdiction. Under this Act, EPA may delegate authority to States to handle some of the Federal responsibilities, provided that the States have legislation for hazardous waste management that is no less stringent than Federal legislation.

Our speaker stated that the Commonwealth of Pennsylvania, which showed early leadership and initiative in developing hazardous waste management legislation, was authorized to administer a "cradle to grave" hazardous waste management program. This Herculean task requires DER to monitor and issue permits for all activities which involve the generation, storage, transportation, treatment, and disposal of hazardous wastes. Activities not in compliance with the regulation are subject to the strong judicial powers that DER can summon. Financial penalties are severe and corporate officials can be subject to prison terms.

Noting that Federal Regulations are extremely complex and difficult with which to cooperate and comply, the approach of Pennsylvania's Department of Environmental Resources (DER) is to help industries — rather than to penalize or destroy them.

He announces with pride that Pennsylvania has not lost a single industry because of non-compliance.

### Accomplishments and Failures

While he understandably boasts of the Department's achievements, Mr. Galida forthrightly admits that since July, 1980, when Pennsylvania began its present program, there is much that it has failed to do, despite its intense and assiduous efforts. More often than not, these endeavors are undertaken in the face of public scorn, threats and even violence in stormy public hearings. The Department seeks rational, reasonable solutions to an on-going, relentless management and regulatory problem that seems to defy all attempts to control it. Its objective is to reach common technological and legal resolution — with

(continued on page 4)

## 1982 DANIEL W. MEAD CONTEST

### FOR ASSOCIATE MEMBERS

The Daniel W. Mead Prize for Associate Members was established in 1939 to honor the memory and accomplishments of the 67th President of the American Society of Civil Engineers. The talents of many of the leaders of the profession were first recognized in previous contests for this significant professional honor. The current contest provides another opportunity for alert young civil engineers to further their professional development and gain national attention.

### RULES

\* Papers are to be written on "PROFESSIONALISM AND ETHICS EDUCATION—DOES OUR EDUCATIONAL SYSTEM DO THE JOB?" Many U.S. engineering schools are deleting professional practice courses in order to trim the total graduation hour requirements.

### JANUARY MEETING

(continued from page 3)

Industry participation and cooperation—to provide satisfactory hazardous waste disposal facilities and design standards; to halt illegal disposal activities; to mobilize a workable program for the control of the generation, transportation, storage, treatment and disposal of hazardous wastes; and to address Pennsylvania's acute abandoned sites problems. To educate the public, prescribes Mr. Galida, is an immediate engagement, and it cannot be postponed.

### Questions and Answers

There were brisk, varied and penetrating comments and inquiries from members of the audience following Mr. Galida's formal address. Our speaker was thorough and well-informed in his responses.

The questions addressed the employment of DER's powers in non-compliance cases, insurance requirements for companies handling hazardous wastes, and the technical disciplines required by companies involved in the hazardous waste area. Only the constraints of time limited the question and answer period.

Vice President McNamee presented Mr. Galida the Section's Certificate of Appreciation and a copy of the 1976 Bicentennial ASCE Annual ASCE Convention Commemorative Book published by the Phila. Section: "The History of Civil Engineering and Construction in the Delaware Valley."

This was an excellent presentation and a rewarding meeting.

What effect does this have on the recent graduate? Also, with the inflation spiral increasing in geometric proportions, many faculty positions are being vacated by professors who can earn more money in private practice. The positions are being filled by foreign nationals who may or may not have been educated in the U.S. What effect will this have on recent graduates?

\* Authors must be Associate Members of the Society.

\* Only one person can write each paper.

\* Each Section can submit only one paper.

\* Papers must contain no more than 2,000 words.

\* One winner will be selected from each of the Society's four zones.

\* The National winner, selected from the zone winners, will receive a wall plaque and a certificate.

\* Winners will be invited to present their papers at the ASCE Annual Convention, New Orleans, October 1982.

\* The paper by the National winner will be published in CIVIL ENGINEERING or ISSUES IN ENGINEERING.

\* By May 1, 1982 seven copies of each paper must be submitted through the Section Secretary Albert M. Tantara to American Society of Civil Engineers, United Engineering Center, 345 East 47th Street, New York, New York 10017.

Phila. Section Associate Members are urged to get to work on the Mead Competition. We are proud of our past winners and want to continue to be in the forefront.

Phila. Section Mead Competition winners are the following:

1974—**John E. Spitko**, National Award

1977—**Joseph R. Syrnick**, Zone I Award

1978—**David S. Shaw**, Zone I Award

1979—**Haym Bemaroya**, Zone I Award

## WOMEN'S AUXILIARY

### March Meeting

The Philadelphia Section's Women's Auxiliary resumes its 1981-82 season with a Luncheon-Meeting on **Wednesday, March 17, 1982** at the Engineers' Club at 12:00 noon. Principal speaker will be **Adeline (Mrs. Marvin) Wachman**, wife of the President of Temple University. The subject will be "China", in which country Dr. and Mrs. Wachman have traveled extensively.

Wives of Section members are cordially invited to attend all Auxiliary meetings, to join the organization and to bring guests. For full information about joining, please call Membership Secretary **Marie (Mrs. Kenneth J.) Zitomer (215) 548-5324**.

## ASCE DUES BILL AND TECHNICAL GROUP DETAILS

Section members will notice in the 1982 dues bill received recently from National ASCE Headquarters, that the PHILADELPHIA (SECTION) DUES is itemized as \$11.00. This amount includes a \$1 assessment for membership in one Phila. Section Technical Group of your choice. **If you choose to be a member of more than one Group, please add \$1.00 for each Group.**

Also, because National's bill did not list the Technical Groups to which your \$1.00 payments were to be applied, you are requested to get in touch with the **Chairmen of the Technical Groups of your preference**, so that their membership lists can be classified.

The appropriate individuals to contact are the following:

### Technical Group Liaison

**William M. Malarkey**

(Section Vice President)

Urban Engineers, Inc.

19th Street & Delancey Place

Phila., PA 19103

(215) 546-3222

### Associate Member Forum

**Thomas J. Lauer**, President

9056 Wesleyan Road

Phila., PA 19136

Office: (215) 365-5166

Home: (215) 673-6498

### Construction/Structural Group

**James Robinson**, Chairman

United Engineers & Constructors, Inc.

440 E. Swedesford Road

P. O. Box 780

Valley Forge, PA 19482

(215) 964-1300, Ext. 281

### Geotechnical Group

**Dr. Ziyad I. Husami**, Chairman

Stone & Webster Engineering Corp.

P. O. Box 5200

Cherry Hill, NJ 08034

(609) 482-3889

### Hydraulics & Sanitary Group

**Dana Pizarro**, Chairman

O'Brien & Gere Engineers

1617 J.F.K. Blvd., Suite 1760

Phila., PA 19103

(215) 564-4282

### Transportation & Urban Development Group

**David Novick**, Chairman

Parsons Brinckerhoff Quade &

Douglas, Inc., Engineers-Planners

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