



ASCE

ILLINOIS SECTION

NEWSLETTER

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Structural Division Lifetime Achievement Award

The Structural Division of the Illinois Section ASCE is proud to announce that Mr. Srinivasa (Hal) Iyengar will be the seventh recipient of its Lifetime Achievement Award. Mr. Iyengar will be presented with this award and honored by his family and friends on Wednesday, June 7, 1995, at the Como Inn.

Mr. Iyengar's career spanned 32 years at Skidmore, Owings & Merrill (SOM), where he served as a Project Engineer, Senior Structural Engineer and, finally, General Partner and Director of Structural Engineering. Since his retirement in October 1992, Mr. Iyengar has been retained by SOM as a senior consultant to the Structural Engineering Department. Over the years, Mr. Iyengar has been widely recognized for his contributions in the development of innovative structural systems for high-rise and long-span structures. He has also been a leader in the profession regarding composite construction and seismic design. Recently, Mr. Iyengar has applied the concepts of rational fire engineering to develop two innovative and unique exposed structural steel systems for the Broadgate Phase II office building in London, England, and the Hotel Vila Olimpica project in Barcelona, Spain. Mr. Iyengar's achievements in the field of structural engineering include his work with the late Dr. Fazlur Khan on the bundled tube system for the Sears Tower and the diagonalized trussed tube for the John Hancock Center in Chicago.

Mr. Iyengar is a fellow of ASCE and a registered structural engineer in the states of Illinois and California. He has served the profession through his involvement in professional organizations including code writing



committees. Mr. Iyengar made significant contributions to the development of the first (1985) edition of the NEHRP Recommended Provisions for the Development of Seismic Regulations for New Buildings. The Applied Technology Council has acknowledged Mr. Iyengar's technical and administrative skills by inviting him to serve as chairman of the task force on seismic rehabilitation of steel structures. He has also served as member of the City of Chicago Mayor's Advisory Commission for Building Code Amendments and the Chicago Committee on High-Rise Buildings. He has published numerous technical articles and has given presentations on topics such as composite steel-concrete design and structural systems for multi-story buildings.

Mr. Iyengar worked extensively with Dr. Alan Davenport and Dr. Nicholas Isyumov of the University of Western Ontario Boundary Layer Wind Tunnel Laboratory to develop the applicable design methodology for the utilization of wind engineering

in the design of tall building structures. Beginning in the late 1950s, this group was the pioneer in the field of experimental research application of wind tunnel technology to the study of building structures, and the John Hancock Center was one of the first tall structures to be investigated utilizing wind tunnel testing.

Mr. Iyengar has inspired many structural engineers at SOM who have professionally grown under his tutelage, going on to significant achievements of their own.

His major and lasting contribution to the profession has been the development of highly innovative yet practical structural systems for steel and concrete structures. Please join us at the Como Inn on June 7 at 6 p.m. for Mr. Iyengar's Lifetime Achievement Award presentation. Call Barb Pries at (312) 263-1606 for reservations.

Technology Champions

The Junior Engineering Technical Society (JETS) sponsors Tests of Engineering Aptitude, Mathematics and Science (TEAMS) competitions. The team winning the Illinois JETS competition came from Homewood Flossmoor High School, Flossmoor, IL.

Science Olympiad competition involves science applications. For Illinois, the winning team came from Maine Township High School West, Des Plaines, IL. Congratulations to all the participants.

Transportation Division Hosts Ralph Wehner

Mr. Ralph Wehner, Executive Director of the Illinois State Toll Highway Authority (ISTHA), was the guest speaker at the February dinner meeting of the Transportation Division. One of the main topics of discussion was the south entrance of the North-South Tollway. While the designs are advancing to the concept phase, and right-of-way acquisition packages are being prepared, federal approval of the Environmental Impact Statement is not expected until late 1995. ISTHA is working closely with the consultants from all seven design sections to ensure that critical design and environmental issues are addressed. Mr. Wehner is confident that the massive undertaking will result in a state-of-the-art highway facility that will serve north-

east Illinois well into the future.

One feature that will be standard on the south extension will be the accommodation of the I-PASS electronic toll collection system. "Fly by" lanes will be included in the improvement to allow I-PASS users to pay tolls without stopping at the toll plazas. In addition to a savings in travel time and a reduction in congestion and pollution, Mr. Wehner pointed out that less time will be spent counting the millions of dollars that are collected in coins each week. Long-range plans include bringing the entire ISTHA system on line with the I-PASS system.

Since ISTHA operations are entirely financed through user fees collected in the form of tolls and through the sale of bonds, Mr.

Wehner noted that funding for a project of the magnitude of the south extension can have an impact on other ISTHA projects systemwide. This may temporarily affect the number of ongoing access additions, resurfacing and reconstruction projects. Other projects on the horizon for ISTHA are renovations to and relocations of aging tollway patron facilities and solving some bottleneck situations. ISTHA also envisions eventually constructing the O'Hare Bypass and a further extension of the North-South Tollway to serve a future northern Indiana and a future south suburban airport.

Mr. Wehner has been working to streamline the ISTHA consultant selection process and has implemented changes that make it very similar to the Illinois Department of Transportation (IDOT) selection process. ISTHA plans to convert to the metric system six to 12 months after IDOT. Federal Highway Authority guidelines will be followed regarding the conversion, and ISTHA will develop metric standards and specifications to accomplish it.

Seminar on RCC Dams

Since the completion of Willow Creek Dam in 1982, 25 additional roller-compacted concrete (RCC) dams, ranging in height from 50 to 294 feet, have been constructed in the U.S. In addition, more than 40 earthfill dams have used RCC for overtopping protection. The widespread acceptance of the RCC overtopping protection concept is evidenced by the fact that 28 different consulting engineering firms or government agencies have designed the 40-plus projects.

Due to the high level of interest in roller-compacted concrete for the construction of new dams and the replacement and rehabilitation of existing dams, the Portland Cement Association (PCA) is conducting a seminar on Roller-Compacted Concrete for Dams and Dam Rehabilitation. The seminar, which is being sponsored by the Association of State Dam Safety Officials (ASDSO) and the Federal Emergency Management Agency, will be held at the North Shore Hilton in Skokie, IL, on May 4-5, 1995. This one-and-a-half-day seminar will provide the latest information on design, construction and performance of RCC for dams and dam rehabilitation.

Speakers on the program include: Ernie Scharder, Concrete Specialist, Walla Walla, WA; Ken Hansen, Portland Cement Association, Denver, CO; Dan Johnson, Woodward Clyde Consultants, Denver, CO; Keith Ferguson, GEI Consultants, Denver, CO; and Jim Marold and Mark Calvino, Harza Engineers, Chicago. They will discuss RCC from experience gained on completed projects.

Registration fee, which includes a course notebook, lunch on Thursday and refreshments both days, is \$50 for ASDSO members and \$75 for non-members. For additional information on the program and registration, contact Susan Sorrell, ASDSO, at (606) 257-5140 or Wayne Adaska, PCA, at (708) 966-6200.

Structural Engineers

Essential Part of Rescue Team in Oklahoma City

Quoting Jon Hansen, assistant fire chief of Oklahoma City:

"... these gentlemen here — our structural engineers — are looking out for us; they're behind us ... they're our angels."

"The structural engineers — they're our guardian angels right now — they're looking over our shoulders at every move and when there is a structural problem identified for us, we are very happy to have them here ..."

Source: Cable News Network (CNN), Saturday, April 22, 1995, interviews, one of which with reporter Tony Clark.

ILLINOIS SECTION NEWSLETTER

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**Submission deadline
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is June 6, 1995**

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PRESIDENT'S NOTES

I am writing this column as a respite from tax return preparation. This exercise always seems to heighten my curiosity and awareness of where the money goes — the curiosity about that which the government took directly and the awareness about that which was left. This is a time of the year when we are reminded that we need to be ever vigilant to balance our limited resources with the competing needs and opportunities at hand. Whether it be personal, business, or volunteer organization, time and money are at a premium, and it takes careful planning to get the best payoff for the investment.

Your Illinois Section Board has been looking at its purpose and role in serving the membership. We need to remain focused to avoid becoming a self-serving bureaucracy that forgot its mission. We seem to come to a point with every issue of describing what the membership wants from the Section. Much of the membership apparently wants this to be a spectator organization, where programs are put on by a few who hope to strike upon a topic that will interest a small portion of the many.

The technical groups have been the primary focus of activity and form the strength of the Section. We are fortunate to have seven technical



groups operating programs averaging several hundred attendees per month. The groups' officers and organizing committees are solely responsible for the popularity of these programs, and I trust that the Board will continue to foster their success. Accordingly, I think we realize the success of these groups are not the successes of the Section.

The non-technical Section activities, specifically the noon luncheon meetings, have fared less well, and regular meetings were dropped at the end of last year as a result of lack of attendance. Numerous changes were attempted over a period of several years to gain support; however, the attendance levels became a detriment to obtaining future speakers and culminated with an embarrassment to the Section when we could not muster two tables of guests to hear the visiting President-Elect of ASCE National.

I feel that the Illinois Section Board and the Section is becoming increasingly invisible to the members because we have less programs with direct member contact than we had in the past. The purpose of this minisate of the Section treatise is not to grouse about the situation, but to explain that the Board is concerned about its lack of success in presenting programs dealing with general interest or professional issues. Without feedback, it's hard to tell why some things work and others don't.

The Board is in the preliminary stages of embarking on its planning process, which was prompted by a

request for budgetary ideas by Finance Committee Chair John O'Holleran. Allocation of resources to foster program success is an integral part of the planning and budgetary processes, which we have started for next year. Responses from Board members ran the gamut, from hosting a national convention, to increasing minority student activity funding, to funding scholarships, to sponsoring community service projects. A questionnaire is being put together to obtain member input, which we expect to include in an upcoming Illinois Section NEWS issue. We would appreciate hearing from you with issues to include in the questionnaire. Please contact any of the Board members, or John O'Holleran.

Bill Babcock

Golf Outing

Mark your calendars! The Illinois Section is having its first golf outing, which will be held on August 23, 1995, at the Gleneagles Country Club in Lemont, Illinois. Gleneagles is a past PGA tournament location and is in beautiful condition. However, we don't expect you to play like the pros. More information and a registration sheet will follow in the next newsletter.

Civil Engineer

The Village of Arlington Heights is recruiting for a full-time Civil Engineer in the Engineering Department. This position serves as a Project Manager for a variety of roadway, sewer, water, and other infrastructure improvement projects. A minimum of five years experience with design, contract document preparation, and construction inspection is necessary. Eligibility for registration as a Professional Engineer in Illinois is required. Salary \$41,000-\$45,000, DOQ. Resumes accepted by Personnel Director, Village of Arlington Heights, 33 S. Arlington Heights Rd., Arlington Heights, IL 60005-1499, until May 26, 1995. EOE/M/F

Just a reminder

UIC, The University of Illinois at Chicago, Off-Campus Graduate Engineering Programs, Fall Semester 1995 Courses

Planning to take a graduate course this fall? Please file an application for admission by June 9, 1995 for degree admission, July 14, 1995 for nondegree admission.

Chicago Suburban Course Offerings

- CME 502 — Advanced Traffic Control Strategies
- EECS 412 — Introduction to Filter Synthesis
- EECS 450 — Automatic Control I
- EECS 476 — Programming Language Design
- EECS 572 — Distributed Software Engineering
- ME 422 — Heating, Ventilating and Air Conditioning
- ME 408 — Intermediate Vibration Theory
- ME 522 — Convective Heat Transfer

For more information, contact Coordinator, Off-Campus Engineering Programs (M/C 160), 851 S. Morgan St., Room 818, Chicago, IL 60607-7050; (312) 996-2311.

SECTION ACTIVITIES

Geotechnical Division

Geotechnical Division meetings are held every second Tuesday of the month, September through May.

Time: 5:30 p.m. — social
6:30 p.m. — dinner
7:30 p.m. — presentation

Place: Como Inn
546 N. Milwaukee, Chicago

Cost: \$25 with reservations, \$30 at the door, \$5 for students with reservations, \$10 for faculty with reservations

RSVP: Eileen at (708) 634-8580 by noon on the Friday preceding the meeting

May Dinner Meeting

Tom Anderson, P.E., who manages the Cary, Illinois, office of the design-build firm of Schnabel Foundation Company, will present two case histories on earth retention and permanent tie-back retention systems.

Date: May 9, 1995

September Field Trip and Dinner Meeting

Traditionally in September, the Geotechnical Division sponsors a geotechnical engineering-related field trip. Then the dinner meeting is held afterward at a nearby restaurant. Look for more information about this event in a future issue of this newsletter.

Date: September 12, 1995

Associate Member Forum

Want to know how to get the flush out here? Come join us on a tour of the largest waste water treatment plant in the world: the Stickney Water Reclamation Plant.

Date: Saturday, May 20, 1995

Time: 9 a.m.

Place: Stickney, Illinois

RSVP: Cliff Galitz at (708) 858-7050

On Saturday, June 17, the famous Sandy Trap will be introducing herself at Gleneagles Golf Course. To reserve a spot to hear what she has to say, contact Chris Rops at (312) 930-9119. Of course, we will be CARTING off to a local CLUB after each event to call the SHOTS over a cup of TEE.

Management Division

For information on the division or its activities, contact Bob Ivarson at (312) 454-1060.

Administration Committee Meeting

Date: May 25, 1995

Time: 5:30 p.m.

Place: Collins Engineers Inc.
165 N. Canal St., Suite 975
Chicago, IL

Construction Conference

Management is co-sponsoring a two-day Construction Management Conference with the *Association of Project Managers* and *American Consulting Engineers Council*. The topic is "Cooperation not Confrontation: Managing Disputes in Design and Construction." For details, contact Howard Birnberg at (312) 472-1777.

Date: June 22-23, 1995

Time: 8:30 a.m. to 5 p.m.

Place: Sheraton Suites O'Hare
6501 N. Mannheim Rd.
Rosemont, IL

Six-Sentence Marketing Plan

STEP 4 — USE MARKETING TOOLS—The phone, news releases, business cards, brochures, instructional tapes, enthusiasm, refreshments, invoices, books, faxable marketing materials. The more tools you use, the more effective your marketing efforts will be. State yours in a sentence.

Environmental Engineering & Water Resources Division

Update on Clean Air Act

Date: May 11, 1995

Time: 12 p.m. — 1:30 p.m.

Place: Chicago Bar Association
321 S. Plymouth Ct., Chicago

Cost: \$10

RSVP: Jamil Bou-Saab at Terra Engineering, (312) 474-1008, by May 8.

David Kee, Director of the Air and Radiation Division of the USEPA Region 5, will be the speaker. He has overall charge of the region's air quality and radiation programs. He participated in the first major study of water pollution in the Great Lakes from 1963-1968. He has since become involved in enforcement activities, including the first enforcement conference on Lake Michigan.

FEQ Short Course

The Environmental Engineering & Water Resources Division and the DuPage County Department of Environmental Concerns are jointly sponsoring a four-day training course in the application of the Full Equation Dynamic (FEQ) unsteady flow hydraulic model. The course instructor will be Dr. Delbert Franz of Linsley-Kraeger Associates, Mountain View, California. Please see the enclosed flyer for registration information.

Date: May 15-18, 1995

Time: 8 a.m. to 5 p.m.

Place: WMX Leadership
Development Center
720 W. Butterfield Rd.
(near Meyers Road)
Lombard, IL

Cost: \$700 (includes software, manual and lunch each day)

RSVP: Eric Loucks at (708) 605-8800 or Rob Covey at (708) 682-7130

Users Group Meeting

The EE&WR Division and the DuPage County of Environmental Concerns also are co-sponsoring an FEQ users group meeting. The half-day meeting will include presentations by Dr. Franz on the new features of FEQ and how the staff at the Department of Environmental Concerns uses the program in storm-water management. There also will be a group discussion on issues of interest to engineers with previous FEQ modeling experience.

Date: May 19, 1995

Time: 8:30 a.m. to 12 noon

Place: DuPage County Center
421 N. County Farm Rd.
Wheaton, IL

Cost: No cost

RSVP: Eric Loucks at (708) 605-8800 or Rob Covey at (708) 682-7130

Urban Planning & Development Division

Thanks to those who contributed to the success of the Permitting Workshop. Interested in planning seminars? Contact Vince Wroblewski at (708) 894-0007, ext. 242.

Division Meetings

Division meetings are held every third Thursday of the month.

Date: May 18, 1995

Time: 8:15 a.m.

Info: Vince Wroblewski, (708) 894-0007, ext. 242