



ASCE

ILLINOIS SECTION

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ILLINOIS SECTION NEWSLETTER

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**Submission deadline
for the March Newsletter
is March 14, 1997**

Saving Chicago and Changing the World

This September, an innovative program was inaugurated within Northwestern University's Environmental Engineering curriculum: Service Learning. Service Learning is a year-long program which provides undergraduates with experience in "real-world" environmental problems, and provides community-based organizations with the technical expertise they need. Associate Professor Kimberly Gray, who is organizing this program along with Professor Robert Gemmill, characterized the program as "a cross between doing research with someone and doing a co-op."

In this year's pilot program, there are nine students in four groups working with two different organizations. The first is the Chicago Legal Clinic (CLC), which is concerned with "brownfield" sites, that is, old abandoned industrial sites, dumps, or landfills. CLC needs technical help to write briefs and legal arguments explaining why sites need to be cleaned. For example, they may need an analysis of the effect of a contaminated site on nearby water resources.

The second group is the Cook County Hospital Department of Family Practice. Several projects undertaken by this group are concerned with the "Little Village," a poor community near Midway airport in an old industrial area. The organization is concerned about interacting environmental problems, health problems, and poor living conditions. Such projects might involve blood levels of lead in children and non-point emission sources of pollution.

Both of these organizations are supporting the cause of neighborhoods with scarce resources to investigate and neutralize the environmental hazards which are plaguing the health of their inhabitants and the stability of their communities. Experience is clearly not the only reward for those choosing to participate in Service Learning; it is an opportunity to provide an otherwise expensive technical expertise (presuming to call the students experts) to those who normally would not be able to afford it.

The current mechanics of the program involve a year-long time commitment, with official enrollment during the winter and spring quarters. The program is geared towards seniors. The fall quarter is used to identify students, form teams, and choose projects. The actual work involves visiting the site and working with the organization involved, but mainly obtaining and deciphering data previously gathered by government agencies or companies. Professor Gray says that "some of the things the students are trying to determine are, if the correct information has been collected; does it make sense; and what kinds of decisions or actions can be taken with the information?"

As this is the pilot year for the program, it will probably change by next year. Professor Gray sees it becoming an alternative to the co-op program as well as providing much-needed design content. She thinks a class size of 12 (or six design teams) is an optimum size, as this way each team receives plenty

(Continued on Page 5)

Read-Dunning Area Revitalized

Civil Engineering at the Cutting Edge

The on-going development of suburban Chicago has been the life-blood of local civil engineers and developers for the past several decades. More recently, however, new opportunities have arisen in the re-development of many areas within the City of Chicago. As attractive as these areas may be to developers, they provide many unique challenges to the design engineer.

One such area of re-development is the former State of Illinois Read-Dunning Mental Health Facility, which is bordered by Irving Park Road, Narragansett Avenue, Forest Preserve Drive, and Oak Park Avenue. This project originated as a cooperative effort between the State of Illinois, the City of Chicago, and The Alter Group.

The west portion of the site is being developed by The Alter Group into a business park (the Chicago Industry Tech Park), similar to those located in the suburbs. The east portion of the site is being developed by Norwood Builders into a large condominium development (Glenlake Condomin-

iums). SPACECO, Inc. contracted with both developers to perform engineering design services for the projects. Christopher B. Burke Engineering, Inc. was also retained to assist with street lighting design and wetland permitting.

The engineering design was complicated by an extensive network of existing utilities, which had to be either phased out or maintained during and after construction. Buried foundations and abandoned steam tunnels also littered the site. In addition, the City's engineering standards, although time-tested, can be quite different from those commonly accepted by suburban municipal engineering departments.

Stormwater detention is not typically required by the City of Chicago but the Department of Sewers required it for this development due to neighborhood concerns. Stormwater detention has been provided for the condominiums in a centrally located retention pond, as well as in the individual parking lots.

Each lot within the industrial park will provide its own detention storage.

Currently, the fourth of eight condominium buildings is breaking ground. Several families have already moved into the first building, and the swimming pool/recreation area was completed in the Summer of 1996. The business park's phase I infrastructure improvements are nearing completion, and Eli's Cheesecake has opened a new production facility within the park.

Redeveloped areas such as Read-Dunning are emerging more and more frequently within the City of Chicago. These areas provide excellent opportunities for developers and civil engineers to increase the quality of life for local residents and merchants. Engineers must take the challenge and continue to transform these antiquated areas into revitalized city neighborhoods of the future.

*Andy Sikich
Urban Planning and
Development Group*

MWRDGC to Host Informational Seminar

A half-day seminar will be held in response to requests for general information regarding the District's Pretreatment and User Charge Programs. The details are as follows:

Date: March 28, 1997

Time: 8:30 a.m.

Place: 111 E. Erie St., 7th Floor
Chicago

RSVP: (312) 751-3000 for reservations, to insure that a space is available for you.

The seminar will be of interest to employees of industrial users, or consultants whose responsibilities include regulatory compliance with the District's Sewage and Waste Control and User Charge Ordinances.

The Program for the seminar will consist of half hour segments dealing with the following subjects:

- History and mission of the District.
- Legislative authority of the District

and Rules Governing the Proceedings, Assessment of Fines and Issuance of Orders under the Sewage and Waste Control Ordinance (SWCO).

- The Pretreatment Program and the SWCO Enforcement Response Procedure.
- Application, review and issuance of Discharge Authorizations.
- Technical assistance available under the Greater Chicago Pollution Prevention Program.
- The User Charge Ordinance and self-reporting procedures and requirements.

Handout material will include reporting forms, instructions, ordinances, regulations, rules, etc. At the close of the seminar, there will be an opportunity for questions, answers, and discussion.

Donald Pryor Roberts, ASCE Lifetime Member

Memorial services for Donald Pryor Roberts, 93, of Arlington Heights, were held at 7:30 p.m. on Monday, October 28, 1996 at Lauterburg & Oehler Funeral Home in Arlington Heights

Donald Roberts was born Aug. 1, 1903 in Paonia, Colorado. He died on Oct. 26, 1996

Mr. Roberts was a retired civil engineer, Vice President of Harza Engineering Company of Chicago. He designed the first automatic control for salmon passage facilities at Pries Rapids (1959) and Wanapum (1963) in the state of Washington, and supervised projects worldwide.

PRESIDENT'S NOTES

It is amazing the notoriety that one enjoys as President of the Illinois Section. Recently during Engineers Week, I had the opportunity to attend a number of activities and meetings. At nearly every event someone would come up to me and say, "Aren't you that ASCE guy?" Of course I would say "Yes". The next question would normally be, "What's going on in the Section?" The answer to that question is "There's a lot going on, what are your interests?" Just look at this Newsletter and you will see a variety of upcoming events of interest to all types of civil engineers.

I have always maintained that the true strength of the Illinois Section lies in our technical groups. The energy and commitment of the engineers that lead these groups provide a variety of informative programs on a regular basis. What I found in reviewing the Illinois Section report on last year's activities confirmed my opinion. The Annual Report indicated that the Section's groups averaged nearly five meetings per month and with a total attendance in excess of 2,000 engineers.

Although their focus is different, each group offers a number of premier events each year. Last year the Geotechnical Group led the way with thirteen meetings including the



Geotechnical Seminar Series on Tunneling. The Structural Group averaged over 60 people for its meetings on topics ranging from foundation systems, code revisions, steel detailing, and project execution.

The Urban Planning and Development Group sponsored a variety of round table discussions; its Project Funding Seminar presented speakers from the legal, financial, and engineering professions discussing funding options for various projects. The Environmental Engineering and Water Resources Group focused its efforts on education. Seminars on SWMM and FEQ Modeling were

extremely successful with engineers being turned away because of space limitations.

The Transportation Group sponsored technical program presentations featuring current project and capital program information for Chicago area transportation agencies such as Metra, ISTHA, Chicago DOA, and IDOT. The Management Group presented timely information on QA/QC, effective presentations, and marketing techniques. The Younger Member Group had 10 dinner meetings in addition to its social activities. Its most ambitious event was serving as local host of the annual ASCE Younger Members Regional Conference held here in Chicago.

What's going on this year is more of the same. Every Technical Group is on its way to bigger and better things. The key ingredient that is needed for success is YOU. The support and interest of you, your colleagues, and employers are essential to keeping the Illinois Section activities successful and relevant. Make plans now to attend a meeting this month; I'll be looking for you.

It's nice being known as "the ASCE Guy"; next year I'll just be known as "didn't you used to be that ASCE Guy." (Sorry, John!)

Allen Staron

20th Anniversary for Center for Study of Ethics in Professions

"Why Citicorp Did Not Fall on Bloomingdale's"

by William J. LeMessurier, Chairman
LeMessurier Consultants, Inc.

In the early 1970's, LeMessurier, one of the nation's leading structural engineers, designed the innovative steel structure of the Citicorp Center in New York City. The 50-story tower was completed and occupied in 1977. A year later, a telephone call from an engineering student led LeMessurier to discover a series of miscalculations and errors in the building of the tower. His new figures showed that the flawed building — a striking new member of the Manhattan skyline — had a one-

in-sixteen chance of collapsing in extremely high winds. Hear how LeMessurier responded to this dangerous situation, with the hurricane season looming.

LeMessurier is chairman and founding partner of LeMessurier Consultants, Inc., and is recognized as a leading authority of tall building design. He created the concept of the tuned mass damper system to control wind-induced motion, first used in the Citicorp Center, and is one of the originators of the "staggered truss system" now widely used for high rise apartments and hotels. A member of the National Academy of Engineering, LeMessurier is an adjunct

professor at the Harvard School of Design. He is a graduate of Harvard College, and received his M.S. from MIT.

Date: Wednesday, March 26, 1997

Time: 5:30 p.m.

Reception will immediately follow presentation

Place: S.R. Crown Hall, IIT Campus
3360 S. State St., Chicago

Cost: Free of Charge

RSVP: (312) 567-3017

This event is co-sponsored by the IIT College of Architecture, the Department of Civil and Architectural Engineering, and the Center for the Study of Ethics in the Professions, 10 W. 31st Street, Chicago, IL 60616.

ASCE Student Chapter: University of Illinois at Chicago

On behalf of all the students at the University of Illinois at Chicago chapter, I would like to say hello. This is our first attempt in what we hope is a closer relationship with the Illinois Section and the professional members of our Section. Our chapter is up and coming and with your help, we hope to make the UIC chapter of ASCE something that everyone in the Chicagoland area can be proud of.

Over the past year, UIC ASCE has seen its membership increase by 10 members, up to 63 paid local members. Approximately 50% of these members are national members as well. We have made strides in getting members to the meetings and keeping them active after they leave the meetings.

As many of you are aware, UIC competes in the Steel Bridge and Concrete Canoe competitions every year. This year's teams have seen tremendous improvement in overall participation as well as the quality of work being done. This year's Concrete Canoe Team has had over 30 different people participating in our weekly activities. The Steel Bridge Team has also prospered this year, with well over 15 people taking some active role.

The UIC chapter is attempting to put together programs to help

increase our visibility and activity level on a campus-wide, city-wide and nationwide level. The first program that UIC plans to start is an on-campus recruiting day. We would like to invite professionals in the area who are filling positions in their company to come to UIC and recruit and interview at the recruiting day. Plans for this activity are still being developed.

At this time, we are trying to get feedback from the professionals in the area as to how successful this program might be. We think there is great potential for a program like this. Not only do you as an employer get an opportunity to pick from the more talented and motivated individuals at UIC, but we get an opportunity to increase interest in the ASCE Chapter on campus.

Finally, UIC ASCE is developing plans to host the Great Lakes Regional Competition (GLRC) in the spring of 1998. The GLRC is the combined Concrete Canoe and Steel Bridge Competition in which over 17 schools from across the midwest participate. Over 300 individuals participate every year making this one of the biggest Civil Engineering events in Chicago. We feel that this not only is a great opportunity to showcase UIC, but is an opportunity

to showcase the quality of work of the Civil Engineering community here in Chicago. Chicago is one of the greatest cities in the world and the Civil Engineers here are no small reason why. We hope that the Illinois Section and the professionals in Chicago will be interested in assisting us in hosting the competition. Not only are we looking for sponsorships and donations but for volunteers to run activities, judge the competitions and speak at banquets during the GLRC weekend. It is still over a year away, but we are well underway in making preparations. If you are interested in sponsoring the competition, are interested in being a volunteer or if you are interested in attending an ASCE recruiting day, please get in touch with us for more specifics. Your support is essential if we are to show everyone just how good the engineering in Chicago is. You can email me at bmelle1@uicvm.cc.uic.edu or call me at (312) 243-3502 for more information.

We are looking forward to hearing from everyone and we'll see you at ASCE events throughout the year.

*Submitted by
Bruce A. Mellen
UIC ASCE*

ASCE Student Chapter: Northwestern University

For the first time in over two decades, Northwestern University's ASCE chapter is participating in the ASCE-sponsored concrete canoe competition. Our long absence from the competition has been met enthusiastically this year with considerable student participation. One of our goals this year, in addition to building and racing a canoe, is to establish an annual Northwestern tradition of participating in the competition. To ensure the chapter's future participation, we are encouraging the involvement of freshman, sophomores, juniors and seniors.

As newcomers to a competition that has been an annual tradition for many schools, we have been faced with additional challenges. Starting

from scratch has forced us to do in one year what many schools have developed over 10 or 20 years. In a three-month period last fall, the design and research for the canoe was completed, students were recruited to help with the canoe and fundraising activities were undertaken. Many students have generously dedicated their extracurricular time and energy to insure the creation of a concrete canoe. After five months of hard work, we have constructed the form in preparation for pouring the concrete in early March.

Our participation in the competition has provided Northwestern students with an invaluable experience. We have discovered many aspects of research and design that

can only be learned by participating in the design process. As an example, we have had the opportunity to explore innovative cement materials in the production of the canoe. We have also learned to organize and work with different teams of people, each with his or her own ideas. We have created a canoe, through teamwork, ingenuity, perseverance and compromise, that is uniquely ours.

If interested in viewing the canoe, please call Benjamin Corotis at (847) 492-9224 or email him at bcorotis@merle.acns.nwu.edu.

*Submitted by
Benjamin Corotis
NW ASCE*

Saving Chicago and Changing the World

(Continued from Page 1)

of individual attention. Numbers will be limited by faculty involvement, as supervision is needed to provide a meaningful technical experience.

The Service Learning program is open-ended and uncertain, with the answers definitely not available in the back of the book. It is a wonderful

addition to the Environmental Engineering curriculum and a much-needed chance for students to learn outside of their normal academic environment. Additionally, the program involves these aspiring engineers directly with the community, working for the community, a habit that should be

encouraged. Undergraduates should be practicing now for their future role of environmental innovators, and saving a part of Chicago is a noble start to changing the world.

Submitted by
Dan L. Carlson, NWU

Refocus for Emerging Energy

The Energy Division has announced a new focus for its Emerging Energy Committee from a Technology base to a Systems base. The major aspects now include markets, infrastructure, regulations, and institutional issues paralleling technology.

Special issues of the **ASCE Journal of Energy Engineering** and technical sessions on emerging energy for the April 1-3 American Power Conference is now on the Committee's agenda.

Bob Camillone, Energy Committee
Chair, Management Group

Transportation Group

David F. Schulz will present his insights into the topic of "20 Things That You Think You Know About Transportation and Development in Northeastern Chicago."

Date: Wednesday, March 19, 1997

Time: 11:30 a.m. social
12:00 p.m. luncheon
12:30 p.m. speaker

Place: Como Inn
546 N. Milwaukee, Chicago

Cost: \$20

RSVP: Dean Kieseling at (312) 946-7121 or FAX (312) 946-7199.

M.S. in operations and technology management

A weekend degree program for managers in technology-intensive organizations

This graduate program is designed for experienced working professionals who require advanced management skills and an integrated business perspective in order to progress in their careers.

In 18 months of Saturday classes, you will learn how to:

- initiate change and innovation
- identify and solve problems
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- lead teams of highly trained professionals
- sell your ideas
- improve operational effectiveness
- manage strategically
- become an entrepreneur

The OTM program is offered at the Great Lakes Naval Training Center in Lake County, Illinois. A new class begins every August.

For additional information, applications, or a schedule of Open Houses, contact the program director, Professor Joel Goldhar, 312-906-6526.

Courses offered include:

- Information Technology in Business
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- Project Management
- Logistics and Supply Chain Management
- Effective Leadership and the Management of Change
- Financial Management and Control
- Marketing and Innovation Management
- Economic Analysis and Business Planning
- Organizational Behavior and Design
- Managerial Accounting
- Strategic Management of the Total Enterprise
- Modeling and Simulation for Business Decisions

Stuart School of Business
Illinois Institute of Technology

SECTION ACTIVITIES

EE&WR Group

The EE&WR Group meets the second Tuesday of every month. The next meeting is:

Date: March 11, 1997
Time: 5:30 pm
Place: Lobby Conference Room
111 N. Canal St., Chicago
Info: David Moughton, (312)
353-6400 x3115

FEQ class will be offered on April 28 to May 1. For more information, call Eric Loucks at (312) 474-1313 or loucked@cdm.com.

Younger Member Group

March Dinner Meeting

Mr. Ernst Kohn, PLS of Patrick Engineering Inc. will discuss and demonstrate the latest equipment and technology in land surveying, including GPS and digital leveling, that are improving the accuracy, time requirements and cost of many engineering surveys performed today.

Date: Thursday, March 20, 1997
Time: 5:30 p.m. Dinner
6:00 p.m. Presentation
Place: River Center, Main Floor
Conference Room
111 N. Canal, Chicago
RSVP: Cliff Galitz at (630)
434-7060 Ext. 1251
Cost: \$12.00 (includes dinner)

The Younger Member Group is geared towards civil engineers aged 35 and under. Featured speakers at our meetings come from all areas of civil engineering. The group prides itself on offering diverse meetings once a month, offering social and networking opportunities and introducing younger engineers to other Illinois Section ASCE specialty groups. We welcome everyone to our meetings and activities, regardless of age or position.

Management Group

For information on the Management Group and its activities, contact Jeff O'Connor at (312) 454-1060 or Karen Steingraber at (312) 467-0123.

Administration Meeting

The next AdCom meeting will take place immediately after the March Luncheon Meeting. The details are as follows:

Management Express Luncheon

Partnering is now more common for the project management of civil works including the major rehabilitation of IDOT's IL Route 83 Sag Canal bridges. Our presentation is "Project Management With Partnering" by Stanley Sklar, JD, from Bell, Boyd and Lloyd. The recent Association of General Contractors guidelines, matrix and forms will be discussed. Project Management Institute members and Keller Graduate School affiliates are encouraged to attend.

Date: Thursday, March 20, 1997
Time: 11:30 a.m. social
12:00 noon lunch
12:30 p.m. speaker
Place: Chicago Bar Association
321 S. Plymouth Court
Chicago
(Jackson and Dearborn)
Cost: \$15.00 - pay in dining room
RSVP: Mark Schultz at (312) 782-8150

Construction Publications

To supplement our recent ADA/OSHA presentation, we obtained reference to the latest sidewalk specification guideline video. Contact Lois Thibault, Training Coordinator, U.S. Access Board, 1331 F Street Northwest, Suite 1000, Washington, DC 20004-1111.

Structural Group

1997 Lecture Series

The 1997 Lecture Series, which is entitled "Challenges in Modern Structural Engineering," will convene twice this month. The first session will take place on March 5, and features lectures from Dr. Anatol Longinow, WJE, and David Kossover, GSA. This session will cover issues relating to blast resistant design. The second session, which occurs on March 19, focuses on engineering liability issues, and will be highlighted

by presentations from attorneys Stephen G.M. Stein and Paul M. Lurie.

The lecture series will take place at the Midland Hotel, 172 West Adams Street, located in downtown Chicago. Preregistration will begin at 5:00 p.m., with the program starting promptly at 5:30 p.m. The third and fourth sessions of the lecture series will be presented on April 9 and April 23. For further information, please contact John Vincent at (847) 965-7500.

Structural Group Scholarship Award

The Structural Group will be awarding its annual scholarship this year in the amount of \$1,000. Full-time junior or senior students with an interest in structural engineering who attend the University of Illinois at Chicago, the Illinois Institute of Technology, or Northwestern University are eligible. ASCE members are asked to consider and encourage eligible students to apply.

Applications are due by May 31, 1997, and may be obtained by calling Abdul Khan at (312) 930-5191.

UP&D Group

Concerned about important issues confronting the civil engineering profession? Visit our next meeting to discuss these items with fellow civil engineers involved in government, private practice, construction, consulting, and other disciplines. Please contact Dan Lynch at (847) 823-0500.

Group Meetings

Group meetings are held every third Thursday of the month. The back room at Denny's Restaurant has been reserved for the Group. Our next scheduled meeting is:

Date: March 20, 1997
Time: 7:30 a.m.
Place: Denny's Restaurant
Oakbrook Terrace