

CHICAGO SECTION NEWSLETTER

March 2009



Newsletter of the Chicago Section of the Society for Mining, Metallurgy, and Exploration, Inc. - Founded Spring 1987 – www.chicagosme.org

NEXT MEETING: Tuesday, March 17, 2009

Topic: Geology and the Changing Chicago-Area Stone Industry

Guest Speaker: Don Mikulic, Ph.D., P.G.
Illinois State Geological Survey
Champaign, IL

Time: 5:30 PM Social Hour
6:00 PM Dinner and Program

Meeting Location: Bohemian Crystal Restaurant **639 N. Blackhawk Dr., Westmont, Illinois**

Directions: **From I-355:** Take to Ogden Ave. exit. Go east on Ogden past Cass Avenue to Blackhawk and turn left. The restaurant is visible on the right.

From the West on I-88 East: Take Midwest Road exit and go south on Midwest (becomes Cass Ave.) to Ogden and turn left.. Take Ogden east to Blackhawk and turn left. The restaurant is visible on the right.

From the East on I-88 West: Take Il-83 (Kingery Hwy) South exit and go south on Il-83 to Ogden Ave. Turn right on Ogden and go west to Blackhawk Dr. Turn right on Blackhawk Drive. The restaurant is visible on the right.

From I-294: Take the exit to Ogden Ave Westbound. Take Ogden Ave. west to Blackhawk Drive, which is after I-83 and Pasquinelli Drive and Westmont Drive. Turn right on Blackhawk Drive. The restaurant is visible on the right.

Map on next page.

Menu: Family Style, Roast Pork, Roast Beef, Spring Chicken and Veal Cutlet

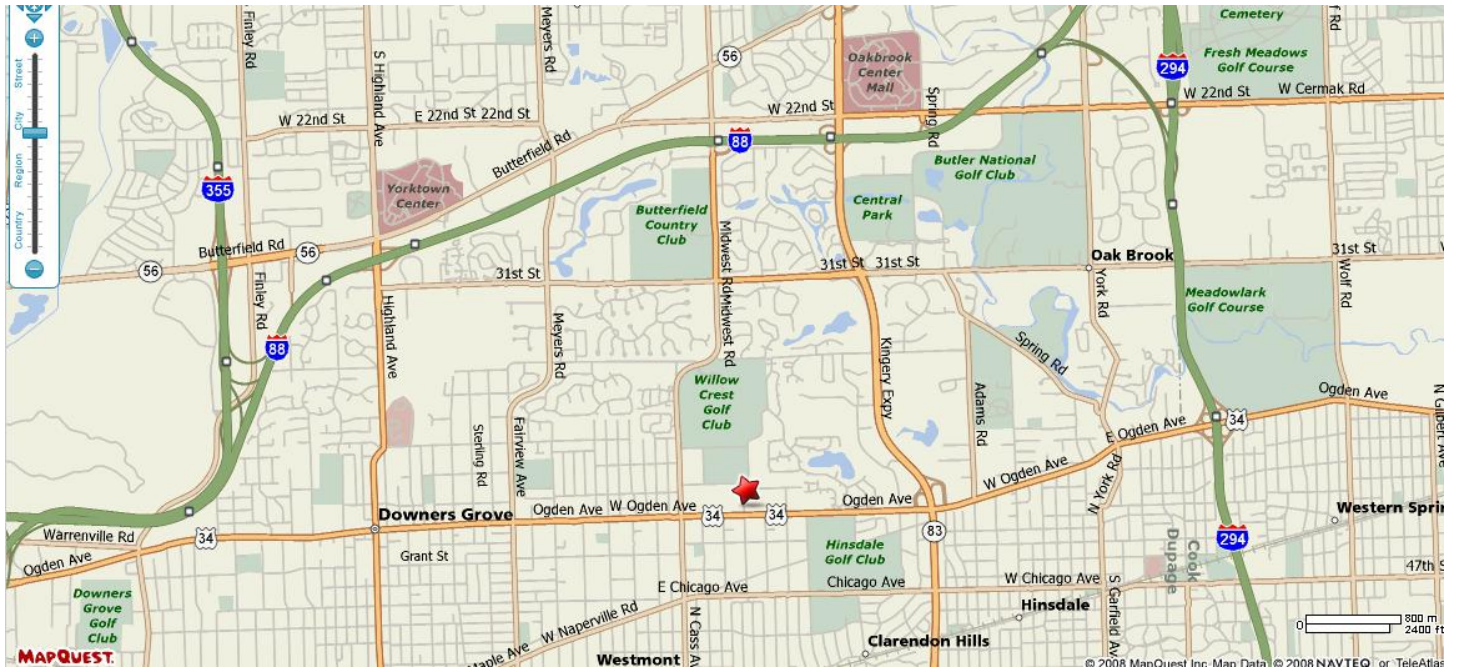
Dinner includes coffee with dinner, home-made rye bread, rolls and butter, choice of soups-of-the-day, sauerkraut, sweet and sour cabbage, boiled potatoes, vegetable of the day and dessert.

Cost: \$40 for dinner/meeting for Members, \$45 for Non-Members
Science teachers or professors who bring students are considered guests of the Section and will get dinner free. Students' dinners are \$5 each.

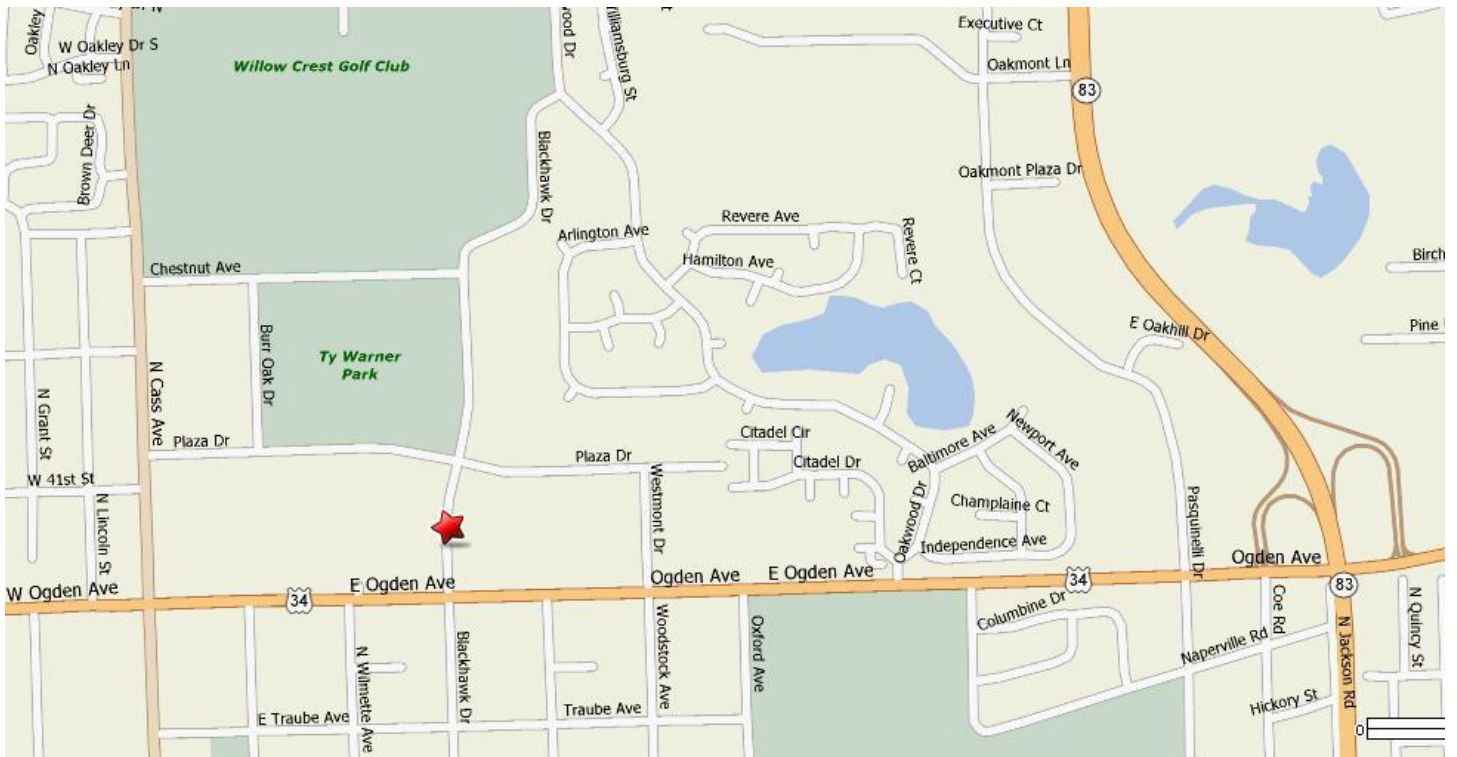
RSVP info below

If you plan to attend, RSVP; PLEASE call before Monday, March 16, 2009. Call or email Agapito Associates, Inc. at either 630-792-1520 (office), 773-343-7292 (Doug Hambley's cell) or dfhambley@agapito.com.

Area Map - The star is the Bohemian Crystal restaurant.



Detail Map



From the Program Committee Chairman:

Next Meeting: *Geology and the Changing Chicago Area Stone Industry*

Abstract: The Chicago area stone industry is one of the oldest and most successful of the Midwest. Beginning with pioneer settlement in the 1830's, local stone resources have been able to meet most of Chicago's needs for high-quality and low-cost construction materials. During this time period, the industry has been subjected to several major changes in the use and types of stone materials needed, but it has successfully met these challenges.

Over the last few decades, the industry has faced new challenges and in order to ensure the continued availability of new stone reserves, a comprehensive understanding of the regional geology is becoming increasingly important.

Speaker Bio: Don Mikulic received a BS in geology from the University of Wisconsin-Milwaukee and a PhD in geology from Oregon State University. Since the early 1970's, he has studied the geology of the Silurian rocks of Illinois, Wisconsin, and surrounding areas. For almost thirty years he has worked at the Illinois State Geological Survey (ISGS), spending most of this time in the Industrial Minerals Section.

In addition to his geological research, he has documented the history of the Chicago and Milwaukee aggregate industry to determine how changes in this industry were impacted by the quality and distribution of local stone resources.

The Last Meeting: *Use of a Roadheader to Develop the Underground Stone Mine at Port of Will County, Illinois*

At the last meeting, which was held on January 13, 2009, Gary Smyth discussed the use of the Voest-Alpine ATM 105 (now Sandvik MT 720) roadheader at the Port of Will County (POWC) Mine with over 30 members and guests. Gary explained

how the roadheader was selected for its ability to mine productively in the shales and limestones in this area. The roadheader can excavate an opening 23 ft wide by 22 ft high at a rate of 3 ft per 20-hr day in limestones and 100 ft per 20-hr day in shales. After completing the decline, POWC used the roadheader to excavate a ventilation loop 400 ft on a side and are currently excavating a perimeter drift from which the property will be mined in retreat. The advantage of the ventilation loop is the large number of faces it created, which significantly reduced the ramp-up time to full production.

Gary explained that the original rationale for the roadheader was to get salable sized material without the need of a crusher. The roadheader produces a minus 2-1/2 inch product but unfortunately a significant proportion of that is minus 200 mesh material, which is not salable. If blended with blasted material, roadheader product is satisfactory.

From a maintenance standpoint, the machine worked well, with only two days of downtime in 7 months. It was stated that wear can be expected in the chain conveyor and the rear jacks on the machine, especially when driving a downward decline. Other problems concerned the transmission, cooling system and wiring. The machine was initially water cooled and the coolers would vibrate and shatter. The problem was solved by converting to air cooling and mounting the coolers on rubber. Problems were encountered with water leakage into the transmission that were mitigated by putting a vacuum on the oil-drip seals.

Gary also said that in the decline they needed only one truck to haul muck even at 2,000 ft and that they backed the truck all the way down – didn't use turnouts.

The presentation generated a lot of discussion and benefited from the comments of Bob Archibald, who initiated the use of the roadheader in the decline at Fox River Stone. The audience included several out-of-town guests, including four from Colorado, and representatives from at least four local aggregate producers.

Contributed by the Editor

CHAIRMAN'S CORNER

For those of you who missed the national SME meeting in Denver at the end of last month, it was well-attended with a sold-out trade show up in the convention hall. There were nearly 80 technical sessions, three of which were directed at construction materials. One of those sessions hosted a presentation by the winners of the NSSGA/SME Student Mine Design Competition.

Eleven teams entered the competition this year. The six students on each team started working on the problem last fall. The problem assigned to all teams is based on actual greenfield project data provided by an operating company. The competition has several stages, with the first stage a written submission to the judging panel. The best six designs are selected for the final round, which is a presentation to a judging committee the weekend prior to the SME meeting.

This year's winners, Virginia Tech (who also won last year), presented their design to a capacity crowd in one of the CMAC technical sessions. The students did an excellent job of presenting the problem and then the design, which included a net-present-value (NPV) financial analysis. After the presentation, the audience gave them a board-of-directors style grilling on what they perceived as deficiencies, which was a real-world learning experience for the students.

This winner's presentation is going to be a regular event in one of the CMAC technical sessions.

Submitted by Rick Ackermann

NEWS OF MEMBERS

Frank Kendorski's Recovery Progressing Well

Longtime Chicago Section member (and Past Section Chair) **Frank Kendorski** is recovery well from his surgery last year but is still undergoing therapy sessions a couple times a week. A measure of his progress is the fact that the length of the therapy sessions has been reduced by half. He has lost weight and appears healthier than he has in a number of years. The Chicago Section wishes Frank a speedy recovery!!

Dean Ennes Makes Financing Presentation to International Business Conference

On March 3, Section member Dean Ennes made a presentation on "Non-Commercial Sources of Financing for International Trade and Investment" at the 2009 Latin America International Business Conference at Northeastern Illinois University (NEIU) in Chicago. The annual two-day conference is sponsored by NEIU's College of Business and Management.

Among the institutions described in Dean's presentation were the Export-Import Bank of the United States (Ex-Im Bank), the Overseas Private Investment Corporation (OPIC), the International Finance Corporation (IFC) of the World Bank, the Inter-American Development Bank (IDB), the Corporación Andina de Fomento (CAF), and the Banco Centroamericano de Integración Económica (BCIE). Dean is Principal at Ennes International, a consultancy focused on financing for infrastructure and industrial projects in developing countries.

A 25-year-plus member of SME, Dean has served as treasurer, vice-chairman, and chairman of the Chicago Section.

Note From Lyndon Dean

The attached note was recently received from Lyndon Dean, former Chief Geologist at Material Service Co. and Charter Chicago Section Member by Gord Stevens.

"We're doing okay and enjoying our retirement here in the Smoky Mtns. We've been down here for nearly 8 1/2 years. It's a pretty part of the country.

I'm glad you guys have kept me on the e mail list for the SME newsletter, even though there are a lot of names I don't know. It sounds like the Section is still hanging in there--would like to have heard some of the programs. Not much professional geology stuff going on around here, although there are a number of geologists in the area. I did serve on the Board of the Colburn Earth Science Museum in Asheville for 6 years. I also did some consulting

for a few years, but haven't done any lately.

I had left shoulder surgery 5 weeks ago, so am still in P.T. and a sling. My wife has to drive me around for a couple more weeks, which I think is really starting to get to her.

Tell your colleagues Hey for me and keep in touch when you have a minute. If you ever get down this way, please stop to see us. It would be great. Lyndon"

Changes in the SME Construction Materials and Aggregates Committee (CMAC)

The aggregates group has historically been a part of the Industrial Minerals Division of the SME. To get more visibility in SME for aggregates, there has been a push in the past few years for the aggregates group to form their own division within the SME called Construction Materials and Aggregates Committee, or CMAC for short. To obtain Division status, however, required that a minimum of 500 individuals within SME to declare CMAC as their primary interest. Within the last year it became apparent that this was not going to happen. Consequently, it was proposed to reincorporate the CMAC group into a reorganized Industrial Minerals group that would be renamed the Industrial Minerals and Aggregates Division.

SME divisions are organized in a "ladder" system. This means that there is normally a progression or "ladder" of volunteer jobs and positions within each division from author/speaker in a technical session through session chair, program chair, technical committee, and then the division offices of secretary, treasurer, vice-chair and chair. This progression is arranged so that training and mentoring occur to allow people to gain experience and familiarity with the system and the other volunteers. Above the divisions are the SME-wide strategic committees and executive board, supported by the SME staff and publications groups.

The reformed Industrial Minerals and Aggregates Division will have two program chairs, one for construction materials and the other for the

industrial minerals group. The technical committee within the Industrial Minerals group, which has aggregates representation on the committee, is heavily involved in creating the commodity reports that appear in the June issue of Mining Engineering.

The 2010 SME will be held in Phoenix new February, so plan now to get out of the cold and snow for next year. This meeting will have four sessions directed at aggregates, tentatively titled Resource Development, Urban Mining, Safety and Automation and Optimization. Titles and abstracts for papers for next year must be submitted by late summer.

The CMAC program committee is actively recruiting for papers for next year. If you are interested in presenting a paper next year, and not just concerning aggregates, please contact either Gordie Stevens at 630-768-3753 or Rick Ackermann at 630-740-4863. You can e-mail Gordie at gstevens@cecinc.com and Rick at racker@continentalplacer.com.

CAN YOU HELP??

Anne Leslie of Raimonde Drilling, Chicago Section's GEM Coordinator, asked if members could get their companies to help with the following:

The 2009 IAAP Science Teacher's Workshop currently has 36 teachers registered and needs sponsors. They are very much in need of donations of corporate memorabilia for teacher's goody bags in quantities of 40. They welcome your support.

If you have any questions or need further information please contact.

Shawn McKinney, Outreach Manager
Illinois Association of Aggregate Producers

1115 S. 2nd. Street
Springfield, IL 62704

Office: 217-241-1639

Cell: 217-899-5125

Fax: 217-241-1641

Email: shawn@hansoninfosys.com

Contributed by Anne Leslie

Would you call these “The Seven Pillars of Gypsum”???



These enormous gypsum crystals were photographed at the Naica Mine in Chihuahua, Mexico. The miner in the photo gives a sense of scale to indicate just how large and beautiful these crystals really are. The miner in the picture is probably also sweating profusely, because the mineralized chamber is reportedly over 150 degrees F. Best guesses from geologists (who ALWAYS pontificate with fingers crossed) are that the crystals took about 30 to 300 years to grow when the chamber was full of hot water and that the in-place tonnage can be easily computed with impossibly high precision.

Contributed by Joe Crawford

Joe also provided the following anecdote:

“Once, before I was married, I went exploring a ratty little mine near Terlingua, Texas looking for perfect and enormous cinnabar specimens. The air was foul, the floor was wet, bats were flitting about, all the cribbing had been robbed, and it was all very unsafe-stupid-insane (I was 25 yrs old at the time). With unhealthy delusions of finding native mercury to play with and maybe some samples of ruby-red cinnabar for the Smithsonian, all I could come up with was a 1974 sports page from a Tucson newspaper. I had apparently been preceded by a wandering exploration geologist from a prior generation who used newspaper to wrap some fantastic and precious mineral specimens. Undoubtedly the crystals must have been as large as at Naica! When I returned home to Tucson in a state of post-mineralization depression, it turned out that the geologist who went collecting at the Mariposa Mine before me was Will Wilkinson, currently featured as the new President of SME on the cover of the March 2009 issue of Mining Engineering--and that's the truth.”

2008-2009 Chicago Section SME Officers

Chairman	Rick Ackermann Continental Placer, Inc. Wheaton, IL 630-407-0800 x 108 Fax 630-407-0799 racker@continentalplacer.com	Program Chairman	Joe Crawford Vulcan Construction Materials, LC Naperville, IL 630-955-8544 Cell : 630-200-4329 crawfordj@vmcmail.com
Vice-Chairman	Steve Tivy PetroLiance, Inc. Elgin, IL 847-741-2577 Fax 847-741-2590 svtivy@petroliance.com	Newsletter Editor	Doug Hambley Agapito Associates, Inc. Lombard, IL 630-792-1520 Cell 773-343-7292 dfhambley@agapito.com
Secretary	Joe Crawford Vulcan Construction Materials, LC Naperville, IL 630-955-8544 Cell 630-200-4329 crawfordj@vmcmail.com	Website Coordinator	Rudy Stein Civil & Environmental Consultants, Inc. Downers Grove, IL 630-963-6026 Fax 630-963-6027 rstein@cecinc.com
Treasurer	Brad Renwick Civil & Environmental Consultants, Inc. Downers Grove, IL 630-963-6026 Fax 630-963-6027 brenwick@cecinc.com	SME Section Representative	John Magyar International Mining Services Belvidere, IL 815-547-9211 Fax 815-547-8552 imsjjm@aol.com
Past Chair	Gordie Stevens Civil & Environmental Consultants, Inc. Downers Grove, IL 630-963-6026 Fax 630-963-6027 gstevens@cecinc.com	GEM Coordinator	Anne Leslie Raimonde Drilling, Inc. Chicago, IL rdcdill@rdc-drill.com

SME Chicago Section Membership Dues Form - NOTE: You do not need to be a national member to join the local section. To become a member of SME at the national level, please join at www.smenet.org or get an application from Gordie Stevens.

NAME: _____

AFFILIATION: _____

ADDRESS: _____

E-MAIL: _____ @ _____

DAYTIME TEL. NUMBER: _____

SPONSOR'S NAME: _____

STUDENT _____ **RETIRED** _____

Make Check for \$20.00 (\$10.00 for Student or Retired) out to “Chicago Section – SME” and mail to: Brad Renwick, Treasurer, Chicago Section SME, Civil & Environmental Consultants., 3041 Woodcreek Drive. Suite 210, Downers Grove, IL 60515