

# CHICAGO SECTION NEWSLETTER

## September 2008



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

## MEETING: Tuesday, September 23, 2008

**Topic:** *Welding of Dissimilar Metal Plates using Explosives*

**Guest Speakers:** Bill Gabonay, Project Engineer  
Dynamic Materials Corporation  
Mt. Braddock, PA

**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 beef, Roast Duck, Roast Pork and Spring Chicken**

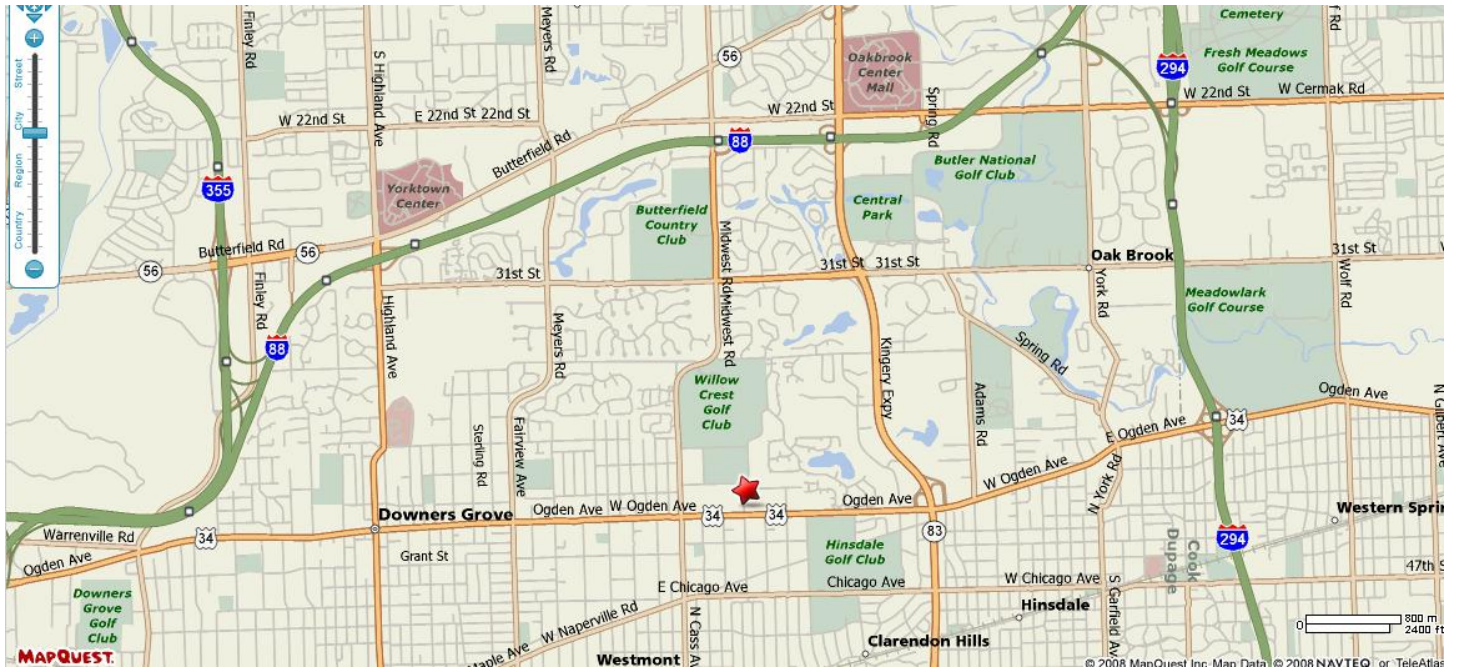
Dinner includes coffee with dinner, home-made rye bread, rolls and butter, choice of soups-of-the-day, sauerkraut, sweet and sour cabbage, boiled potatoes, vegetable of the day and dessert.

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

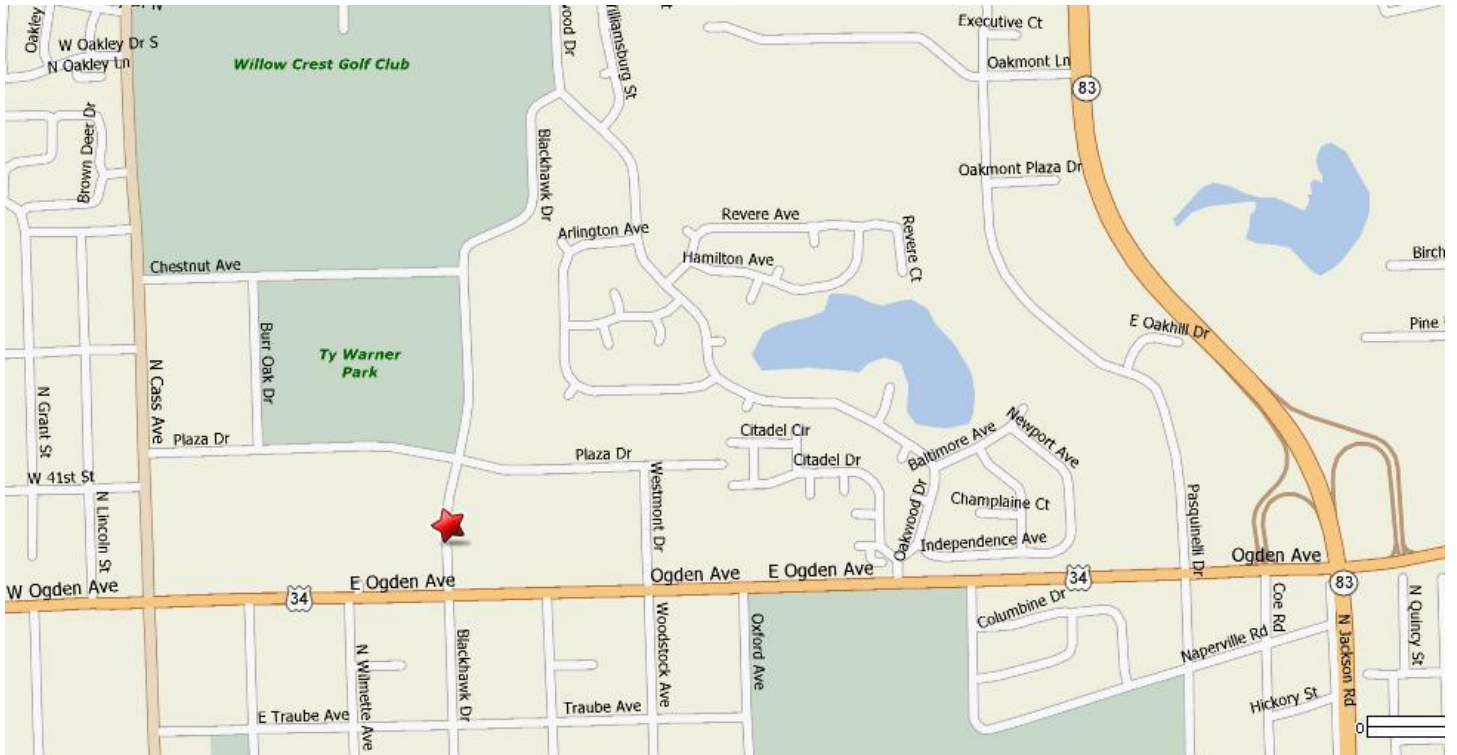
**RSVP info below**

**If you plan to attend, RSVP; PLEASE call before Monday, September 22, 2008. 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: Welding of Dissimilar Metal Plates using Explosives.**

**Abstract:** This presentation describes the processes and resources involved in the manufacture of explosion-welded clad metal plates at Dynamic Materials Corporation in Mt. Braddock, PA. The presentation gives a general overview of the explosion welding process and the manufacturing operations involved in producing the clad plates. The presentation also includes a brief discussion of a few of the end uses and applications of explosion welded clad plates.

Finally, the presentation focuses on the function of the Dunbar mine as a shooting chamber in the explosion welding process. A brief background and description of the mine is followed by a summary of the daily shooting operations at the mine site. Observations and data describing the behavior of the mine in response to these operations are discussed.

**Speaker Bio:** Bill Gabonay is a Project Engineer with Dynamic Materials Corporation (DMC) in Mt. Braddock, PA, where he has worked since graduating with a B.S. in Chemical Engineering from Pennsylvania State University in 2006. His two years of experience working with the explosion welding process includes responsibility for special projects including the measurement of overpressure and vibration levels outside the Dunbar Mine from the clad blasts. He is a member of ASM International.

**The Last Meeting:** At the last meeting, held on Wednesday March 5, 2008 at the Arrowhead Golf Club, **Rich Budinger** and Scot Lord of Fairmount Minerals spoke on *The New Menominee, Wisconsin, Silica Sand Mine and Fairmount Corporate Sustainability Philosophy*. After a brief introduction outlining Fairmount Minerals' business and markets, the speakers discussed Fairmount's Corporate Responsibility and Sustainability Commitment. They then discussed the new plant in Menominee, Wisconsin that was under construction at the time of the meeting and explained how the company's philosophy and reputation had helped during public hearings on the permitting. Rich then discussed the current status of the project

using photos and charts. This part of the presentation also focused on the LEED Certification for the office and shop and discussed some of the incentives Fairmount is anticipating through "Focus on Energy" for the installation of high efficiency motors and VFDs.

*Contributed by the Editor*

## **CHAIRMAN'S CORNER**

**Welcome back to this year's series of SME meetings!!** We are starting with a new (to us), more centrally located restaurant, which I am told is located in the same building where SME met a few times about 6 or 7 years ago. This restaurant serves "family style" which those of you familiar with the Golden Duck or Greek Islands of a few years ago will remember. It has been suggested that we alternate meetings between this new location and one down south near I-55. This will be discussed at this month's meeting. Currently meetings are scheduled for every other month until next May for a total of 5 meetings.

Like most organizations, the Chicago SME section takes volunteer work to make it operate. So we need people who are willing to contribute.

New this year is a formal committee of individuals solicited from the various companies to suggest and select speaker topics. This group will be asked to suggest speakers if they know someone who is a recognized expert on one of the topics. Most of the "meetings" of this group will be held by dial-up conference call to minimize the strain on everyone's time. **If you're interested, give me (Rick Ackermann) a call at 630-407-0800 ext. 107 or 630-740-4863.**

We are also in need of someone to help update the website, which for years has been hosted on Continental Placer servers.

Finally we need input from you the members with material for the newsletter – professional news, open house information, items which you think would interest our group, talks people from your company will be giving and more. The SME newsletter and any information in it gets found by the search engines when it's posted on the webpage. Having been newsletter editor for several years, I was surprised several times by phone calls out of the blue asking for specific information or how to contact certain authors or individuals named in our newsletter.

*Submitted by Rick Ackermann*

## **Looking for Speakers for This Year:**

**The Chicago SME is in the process of scheduling speakers for this year.** If you have a subject you are interested in hearing presented, know of someone you would like to have speak to our group, or would like to give a talk yourself, please contact our Acting Program Chair, **Doug Hambley at 630-792-1520** or you can e-mail him at [dfhambley@agapito.com](mailto:dfhambley@agapito.com)

## **NEWS OF MEMBERS**

### **Bob Archibald Now Independent Consulting Engineer**

**Bob Archibald**, has left his former employer to set up shop as an independent consultant in mining engineering and operations. Bob is a native of Butte, Montana, and is a third-generation mining engineer. Bob has over 35 years of experience in mine operations, quarrying, consulting, and publishing. He is a long-time member of SME. Bob holds a BS in Mining Engineering from Montana Tech, an MBA from Oklahoma City University, and is a Registered Professional Engineer. His office is in Elburn, Illinois, and he can be reached at [bob@archibald.com](mailto:bob@archibald.com) or 630-608-3678, where he loves to discuss elk hunting.

### **Joe Crawford Joins Vulcan Materials**

In June 2008, **Joe Crawford** gave his notice to Agapito Associates to take a position as Manager of Geological Services with Vulcan Materials. This position became open with the departure of **Peter Curley** to pursue other interests. The SME section wishes both Joe and Peter good luck with their new endeavors!!

### **Frank Kendorski in Hospital**

Longtime Chicago Section member (and Past Section Chair) **Frank Kendorski** collapsed at his home on Friday, August 8, 2008. After routine checks could not identify the problem, Frank was given an angiogram and was found to have significant blockages in several arteries. As a result, he underwent open-heart surgery and had a triple bypass on or about August 14. He was relocated to Marianjoy Rehabilitation Hospital in Wheaton around August 17 but was returned to Good Samaritan Hospital in Downers Grove for additional surgery around August 30. As of September 15, he is still in Good Sam and about to be moved to Monitored Care from Intensive care. The Chicago Section wishes Frank a speedy recovery!!

## **DO YOU KNOW YOUR ILLINOIS MINING HISTORY?**

### **Early Days of Coal Mining in Northern Illinois**

Although prior to the 1860s, some mining was done in the region south of Joliet, Ill., those early mines were primarily small affairs that supplied local needs. The coal mining "boom" in the northern fields of Illinois really dates from 1864. Around the town of Braidwood, a farmer struck coal while drilling a well for water. For the next 50 years, thousands of people came into Will, Grundy, and Kankakee Counties to seek their livelihood in the coal mines.

The coal boom of the late 1860s went hand in hand with the development of an extensive railroad network that allowed coal companies to ship their products cheaply to large markets in the rapidly growing industrial cities. The Braidwood area coal was shipped mostly to Chicago.

Soon after the discovery of the extensive coal fields in the 1860s, large corporations bought huge tracts of land in the area. The most important of these was the Chicago, Wilmington, and Vermillion Coal Company, which was formed in 1866 by rich investors from Boston and Chicago. Mines were sunk by many companies, and towns sprang up around the mines. These "boom towns" exploded in size as miners flocked in from eastern states (especially Pennsylvania) and from Europe. Braidwood once had 8,000 people and was the second largest city in Will County. In the mid-1870s, it was the most important coal town in northern Illinois.

Miners picked and shovelled the coal for ten hours a day, loaded it on small cars, and pushed them to an area where mules would pull them to the cage to be hauled to the surface.

Miners used timber to prop up the roof where they worked, but often huge rocks would fall, thus trapping, injuring, or killing them. Miners complained that the coal companies did not supply them with adequate rails, cars, lumber, or fresh air. Explosive gas was present in some mines and many miners were injured or killed by blasts. In February, 1883, seventy-four miners were killed in the "Diamond Mine Disaster," when water from melting snow on the surface suddenly poured into the mine,

drowning the men working below. It was the worst mining disaster in Illinois history up to that time.

The most common complaint of the miners, however, concerned their pay, and the total control which the companies had over their financial well-being. Most mining towns were "company towns." The coal company owned the land. They built, rented, or sold the houses to their workers. They also often forced miners to buy exclusively from the company-owned store.

Miners were usually paid monthly in the early days, with the company holding two weeks' back pay. Thus, miners who quit often lost two weeks' pay. Miners also had the expense of getting their tools sharpened, and they had to buy oil for their lamps which provided the only light underground.

Miners were paid by the ton, and they often claimed they were cheated by the coal companies. The operators could easily cheat the men by saying that too many rocks and particles of clay had been put in the mine cars. *Prior to 1898, the coal was dumped over screens which separated the coal into large and small lumps. Miners were paid for the larger pieces that remained above the screen. The coal companies sold the small chunks too, but these apparently were mined free.*

The weather and business conditions in general, also affected the miners' paycheck. Most miners were unemployed during summer months, when the demand for coal for heating decreased. If factories cut back or closed during a depression, even less coal was needed; so again miners were out of work. A committee created by the State Board of Charities investigated the income of miners in northern Illinois in 1889. They found that the average miner made only \$379.44 in a year. A miners' union existed in Braidwood as early as 1872. The pioneer miners of the 1860s and 1870s were mostly native-born Americans or immigrants from northern Europe--Irish, English, Scottish, Welsh, German, French, and Belgian. After 1880, however, more and more miners came from southern and eastern Europe--mainly Italians, Bohemians, and Poles. Misery was one thing they all had in common.

In 1890, the United Mine Workers of America was formed out of the various local unions then existing in Ohio, Pennsylvania, Illinois, and Indiana. The UMW was the nation's earliest and most

successful industrial union, and it was the nation's largest union for several decades following 1900. From 1899 to 1908, the UMW president was John Mitchell, who was born in Braidwood on February 4, 1870.

The miners used many tactics to achieve their goals. Since they composed the large majority of the populace in some areas, they could elect candidates who were sympathetic to their cause. Several coal miners were elected to the General Assembly in Springfield. These representatives passed laws favored by the miners--laws dealing with safety, company stores, and fairness in pay. However, the courts were sympathetic to business interests, not to workers, so the laws were often struck down.

The most successful weapon of the miners was the strike. Serious strikes by miners in northern Illinois occurred in 1868, 1874, 1877, 1889, 1894, and 1897. After the 1897 strike the miners received a raise and the eight-hour day.

Violence often occurred during the strikes. Miners sometimes tossed garbage into the shafts, and company property often caught fire during the strikes. Miners derailed trains, burned railroad bridges, or unhooked railroad cars.

Adapted from Illinois Labor History Society webpage\_

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## **UPCOMING MEETINGS & EVENTS**

### **For your schedules:**

September 22 to 24, 2008 **MINE** *Expo International*, Las Vegas, Nevada.

December 9 to 10, 2008, **13<sup>th</sup> Annual Safety Seminar for Underground Stone Mines**, Louisville, Kentucky. For more information contact Lou Prosser 412-386-4423 [lprosser@cdc.gov](mailto:lprosser@cdc.gov).

February 22 to 25, 2009, **2009 SME Annual Meeting and CMA 111<sup>th</sup> National Western Mining Conference**, Denver, Colorado.

March 1 to 4, 2009, **2009 Prospectors and Developers Convention (PDAC)**, Toronto, Ontario.

**2008-2009 Chicago Section SME Officers**

<b>Chairman</b>	<b>Rick Ackermann</b> Continental Placer, Inc. Wheaton, IL 630-407-0800 x 108 Fax 630-407-0799 racker@continentalplacer.com	<b>Program Chairman</b>	<b>Frank Kendorski</b> Agapito Associates, Inc. Lombard, IL 630-792-1520 Fax 630-792-1580 frank@agapito.com
<b>Vice-Chairman</b>	<b>Steve Tivy</b> Petroliance, Inc. Elgin, IL 847-741-2577 Fax 847-741-2590 svtivy@petroliance.com	<b>Newsletter Editor</b>	<b>Doug Hambley</b> Agapito Associates, Inc. Lombard, IL 630-792-1520 Cell 773-343-7292 dfhambley@agapito.com
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<b>Past Chair</b>	<b>Gordie Stevens</b> Civil & Engineering Consultants, Inc. Downers Grove, IL 630-963-6026 Fax 630-963-6027 gstevens@cecinc.com	<b>GEM Coordinator</b>	<b>Anne Leslie</b> Raimonde Drilling, Inc. Chicago, IL rdcdrill@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](http://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