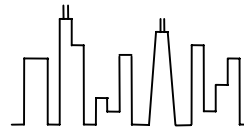


# CHICAGO SECTION NEWSLETTER

October 2004



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

## MEETING: Tuesday, October 19, 2004

**Topic:** "Effect of Blast Design on Response of Cracks in Residential Structures"

**Guest Speaker:** Dr. Charles (Chuck) Dowding from Northwestern University



**Time:** 5:15 PM Social Hour *Note the new starting Time!!!*  
6:00 PM Dinner *New Dinner Menu - we need advance reservations!*  
7:00 PM Speaker *We expect to be done by 8:00 PM.*

**Place:** Ramada Inn at Burr Ridge, IL 300 South Frontage Road, Burr Ridge, IL. 630-325-2900

**Directions:** From I-55: Exit # 276A - County Line Road South, go to the first traffic light Turn Right, then the road turns an immediate right; follow the road around until you are parallel to the freeway, past the Extended Stay America. The Ramada will be another 150 yards ahead on the left.

From I-294: Exit on I-55 Westbound. County Line Road will be the next exit

From I-88 & I-355: Exit to I-355 southbound, go to end of freeway at I-55 Head east toward Chicago; County Line Road is just east of Kingery Highway (IL # 83)

**Menu:** Service will be restaurant style, with your choice of two entrées: **Herb Crusted Pork Loins** sliced and served with natural pan gravy or **Chicken Limone**, chicken breast sautéed with lemon, white wine, chicken stock and a touch of cream. Dinner will include an appetizer, salad, vegetable, potato or rice and dessert. A vegetarian plate is available on request.

**Cost:** \$25 for dinner/meeting for Members, \$30 for Non-Members. Science teachers or professors are considered guests of the Section and will get dinner free. Student's dinners are only \$5.

**ADVANCE RESERVATION NEEDED:** This restaurant wants a meal count on Saturday for a Tuesday meeting.

If you are coming tell us, **PLEASE**. Call or e-mail either

Gordie Stevens of Patrick Engineering at 630-795-7429 [gstevens@patrickengineering.com](mailto:gstevens@patrickengineering.com)

Rick Ackermann of Patrick Engineering at 630-795-7246 [rackermann@patrickengineering.com](mailto:rackermann@patrickengineering.com)

*And give us your dinner selection (see above) we can do some late reservations, but...*

### From the Chairman:

We are deep into a highly divided presidential election season this year. As we approach the coming election on November 2, 2004, I would like to encourage you to be an active part of the process. SME is an engineering and technical society not a political lobbying organization; therefore, I'll keep my comments politically neutral. However, the political platforms of some of the local and national candidates under consideration may have significant influence or consequence to an industry that many of us depend for a living; or at the very least, an industry that our economy depends on. There are a wide range issues being debated, not necessarily related to mining that may directly affect our lives here locally, nationally, and abroad. The political outcome will impact us during the next few years and possibly many years to come. I urge all of you to study the issues and candidates carefully and then vote for those you feel will most nearly carry out your idea of good government. At the very least, share your thoughts or important issues with others. However, if you have access to the Chicago Section's e-mail address list, please do not use it to promote your political position. As your personal circumstances allow, I encourage you to serve in public office; including school or zoning boards, city and county councils, state, and national positions. We can make a difference.



- Gordie

## ***From the Program Chairman***

### **At This Meeting: Effect of Blast Design on Response of Cracks in Residential Structures**

NOTE: This talk will contain some information that may assist the operators in defending themselves from criticism that “*your blasting is cracking my house!*” That was not the primary purpose of the study, but the information gained during the study on weather induced crack response was an important result.

–the editor

This case history describes the instrumentation of a house near an aggregate quarry to assess the effect of changes in blast design on the house response. The velocity response was measured for the superstructure as well as walls and ceilings. Micrometer response of three cracks was measured as well. In all some 11 velocity transducers and 3 crack sensors measured excitation and response for each blast.

Dynamic response of these cracks was compared to various measures of ground and/or structure motion to determine those with the best correlation. Variations in the ground motion and air pressure wave (air blast) reflected changes in the blast design. In addition dynamic crack response was compared to the long-term, weather induced crack response as well as the changes in temperature and humidity that produced the response.

The study confirms the domination of long-term, weather induced crack response compared to the dynamic response produced by blast-induced phenomena.

### **The Speaker**

**Dr. Charles Dowding** is a member of the board of directors of the International Society of Explosive Engineers and the American Rock Mechanics Association and founded Digital Vibration Inc., the first company to perfect remote digital blast vibration monitoring in the early 1980s. He has written widely in the field of geotechnical engineering, and is best known for his three books: Construction Vibrations, Blast Vibration Monitoring and Control and GeoMeasurements by Pulsing TDR Cables and Probes. He received his

B.S. from the University of Colorado and Ph.D. from the University of

Illinois, was a Royal Norwegian Fellow at the Norwegian Geotechnical Institute and taught at the Massachusetts Institute of Technology before joining Northwestern University. Dr. Dowding (along with co-authors) received the Applied Research Award from the National Rock Mechanics Committee for work on blast induced cracking of structures. He has consulted extensively for mining, quarrying and construction firms. Currently he is developing systems to monitor and display autonomously the status of critical facilities through the Northwestern Infrastructure Technology Institute.

### **Last Meeting**

**Ed Kelleher**, Vice President of DBT Mineral Processing–USA talked about crushing using feeder breakers as an alternative to traditional fixed crusher installations. Feeder breakers do not require extensive foundation set up or dump box as do cone or jaw crushers. Kelleher stated that for the right application, a feeder-breaker would cost more initially than some crushers, but can have lower total setup costs and can outperform and have lower maintenance costs that the crusher it replaced. The feeder-breaker can be skid mounted, and be set up and running within 3 days of delivery. Moving the unit can be done within a couple of days for a short move. More time may be spent moving the conveyor on a long move. Depending on the setting, a large feeder-breaker can take 60 inch x 60 inch (narrow dimensions – the length can be longer than that!) and reduce it to –6 inch or – 4 inch pieces. And they work best when choke fed. Kelleher showed pictures of a feeder breaker being fed by a 75 ton truck.

There are applications where feeder-breakers will not perform well, and Kelleher noted some of them during his talk. He also provided handouts and CDs to all who wanted information on his company’s products, and gave away t-shirts and other items. If you have questions or need information you can e-mail him at [dbtminpro@aol.com](mailto:dbtminpro@aol.com).

### **Speaker For November:**

Marshall Miller, SME  
Henry Krumb Lecturer

## ***Your Input Requested –***

Any comments on our new location and earlier meeting time? We have received some already, but the Executive Committee would like to hear some more comments, pro & con.

We are hoping this location & time will be easier and more accessible location for those toward the southern end of our region while still being the same travel time for those living in the western suburbs!

By Rick Ackermann

## ***By-Laws Change for the Chicago SME Section***

At the last meeting, it was brought to the attention of the Executive Committee that our Chicago Section Bylaws restrict the number of consecutive annual terms officers (or at least the Chair) may serve. Due to the fact that Gordie Stevens has recently been elected by the Section for his fourth consecutive term as Chair, the issue was brought before the attending members during our September 21<sup>st</sup> meeting. A motion was proposed to extend the number of consecutive annual terms for Chair to an indefinite number, based on the voting preferences of the Section members. At that time, the motion was seconded, and approved by unanimous vote of those in attendance.

Congratulations to our now legally elected chair, Gordie Stevens.

## ***SPEAKERS FOR NEXT SPRING MEETINGS:***

The Chicago SME is actively recruiting speakers for certain of our meetings for next spring. If you have any suggestions for speakers or topics, they will be welcomed by **Frank Kendorski**, our Program Chair. If you would like to share any of the innovations or successes from your operation with the group, we would appreciate volunteers from within our own ranks. If any of our vendors would like to present technical material in an educational format, this would be welcomed.

*Continued*

Send your suggestions in to **Gordie Stevens, Frank Kendorski, John Head, John Magyar, Steve Tivy, Rick Ackermann** or any combination thereof. Phone numbers or e-mail addresses can be found at the end of the newsletter, or at our website link:

<http://www.chicagosme.org/officers.htm>

We hope to see all of you at the meetings sometime this year.

## UPCOMING MEETINGS & EVENTS

For your schedules

### Great Lakes Chapter Society of Explosives Engineers

### 2004 Vendor Trade Show

Thursday Evening  
October 21<sup>st</sup>  
6:30 – 9:00 PM

at the  
HOLIDAY INN  
Willowbrook, IL  
7800 S Kingery Hwy (Rte 83)  
On east side of Kingery Hwy  
just north of I-55

### Door prizes and Vendors Raffle

For information call  
**Paul Rezmer**  
708-342-0484 or 708-203-4886

Website: [www.iseegreatlakes.org](http://www.iseegreatlakes.org)

### 9th Annual Safety Seminar for Underground Stone Mines

Seminar to be held at Dec 7-8 at Louisville,  
Kentucky

Seminar Includes:

- Early bird Underground Electrical Safety Workshop on Tuesday Dec 9<sup>th</sup> starting at 4:30PM
- Technical sessions Wednesday AM NIOSH on Hearing Loss Simulator MSHA on diesel particulate controls

USGS on Agg Industry trends  
Kendorski on geologic hazards  
And More...

- Parallel workshops on Wednesday afternoon on Safe Mine Development & Root Cause of Accidents/Part 50 Reporting

Contact:

Lou Prosser via email at [lfp2@cdc.gov](mailto:lfp2@cdc.gov)  
or by phone at 412-386-4423

Or

Donna Opfer via e-mail at [dbo0@cdc.gov](mailto:dbo0@cdc.gov)  
or by phone at 412-386-6564

### CONEXPO-CON/AGG 2005 March 15-19, 2005 Las Vegas, USA

CONEXPO-CON/AGG 2005 will be the world's largest international gathering place in 2005 for the construction and construction materials industries, showcasing the latest equipment, services and technologies.

Check out the information at  
<http://www.conexpoconagg.com/>

### From The PIE & GEM Committees

### FIRST "CAVALIERS IN THE QUARRY" A SUCCESS

The LaSalle Peru Township High School Foundation for Educational Excellence and Illinois Cement Company partnered to present "Cavaliers in the Quarry" on October 2. This was a community education event and a fundraiser for the Foundation. There were over 600 paid admissions and 150 volunteers on site.

Illinois Cement furnished the location, Western S&G contributed sand for the treasure hunt, and rocks for the pet rock painting. The Earth Science Club of Northern IL (ESCONI) had a fossil and mineral display. The Illinois DNR Rock Box trailer was present and MSHA had a safety exhibit. Pieces of John Deere, Caterpillar, and Hitachi equipment were on display. They even let the kids climb up into the cab on some of the equipment.

There was great community support from the Cities of LaSalle, Peru, and Oglesby,

including police, fire department, and Peru Volunteer Ambulance, plus State Police, Army Reserve, Radio Station WAJK-FM, and LaSalle News Tribune.

Various student organizations and sports teams staffed the activity stations: rock bowling, coloring station, fossil making, dig for treasure, rock painting, face painting, stone throw, and target golf. The FFA and the teachers handled the concessions. Pouncing Panthers 4-H Club helped with the nail pounding which was sponsored by Maze Nails.

It was a wonderful opportunity for families to come out and learn what's happening behind the berm.



School Mascot "Cavalier" with Illinois Cement operators. Note the small head barely visible in the truck on the right

Submitted by Linda Hiltabrand

### The Gem Committee Activities

- The SME has material for talks at schools if anyone wants to volunteer. We have the videos *Rock Odyssey*, CAT's *Common Ground*, a couple of gold pans, etc. Rick Ackermann has given several elementary classroom talks over the past two years, and will give one in a Jr. high this fall.
- The SME will sponsor students and teachers to various workshops and events. If any member knows of a worthy cause he would like us to sponsor please send a note to one of the executive committee.
- The IAAP is always hunting for rock samples for the teacher workshop – 35 pieces needed of each type for rock kits.
- For more info contact Anne Leslie of Raimonde Drilling at 773-889-1412 or e-mail her at [rdcdri@rdc-drill.com](mailto:rdcdri@rdc-drill.com)

## **Changes in the Chicago Mining Community:**

### **John Head Joins Continental Placer:**

Around the middle of September, **John Head** joined Continental Placer Inc. at the local office in Wheaton, Illinois after nearly nine years with Mactec. His new company has an active mining practice, to complement its extensive environmental business. For more information on the company, please see CPI's website – the URL is at the end of his contact details below.

John said he had “decided to return to my roots and get back to mining engineering.”

Note that Continental Placer has moved their local offices over the summer out to Wheaton.

H. John Head, P.E.  
Senior Principal Engineer  
Continental Placer Inc.  
CPI Environmental Services, Inc.  
1123 Wheaton Oaks Court  
Wheaton, IL 60187  
Phone: 630-407-0800, x 103  
Fax: 630-407-0799  
Cell: 630-750-0652 (unchanged)  
E-mail: [jhead@continentalplacer.com](mailto:jhead@continentalplacer.com)  
Web: [www.continentalplacer.com](http://www.continentalplacer.com)

### **Richard Phelps, Former Managing Editor of EM&J, Joins Patrick Engineering**

**Dick Phelps**, the former Managing Editor of Engineering & Mining Journal, has joined Patrick Engineering as Senior Project Manager at their Lisle offices. Prior to joining E&MJ, Mr. Phelps spent 8 years in the banking industry as a mining engineer. His group was responsible for evaluating and approving large capital finance loans for new and expanding mining operations.

Prior to joining Chase, he spent several years in the coal industry at various locations in the US.

Dick Phelps can be contacted at Patrick Engineering

4970 Varsity drive  
Lisle, IL 605  
Phone: 630-795-7  
Fax: 630-434-8400  
Cell: 630-816-  
e-mail: [rphelps@patrickengineering.com](mailto:rphelps@patrickengineering.com)

### **Raj Rajaram Forms His Own Independent Company:**

During the summer, our former Program Chair **Raj Rajaram** left Black & Veach and formed his own consulting company in association with a partner in India. He is now an independent consultant working in the areas of Hazardous Waste Management, Geotechnical/Tunnel Engineering and Construction. Raj has started a company in India to transfer US technologies in hazardous waste management and wastewater to clients in India. His company is called **Complete Environmental Solutions Private Limited** ([www.cespl.com](http://www.cespl.com)) and is located in Noida, India (suburb of New Delhi). From looking at his web site, Raj will be working with various associates offering a wide range of services. Raj is still living in the Chicago area and can be contacted at [raj2468@comcast.net](mailto:raj2468@comcast.net), or by phone at 630-915-6176.

And most of us thought we had a long commute to work....

*by R. Ackermann*

### **E-Mail Newsletter & Notice Recipients:**

Within the next three weeks I will be sending our a e-mail that you MUST reply to if I am to continue to sent you our notices of meetings, newsletters & etc. Due to the passage of the Federal CAN SPAM ACT of 2003 the rules are changing so that by early in 2005 I will need your permission to send out e-mails for the Chicago SME. It seems that sending out notices for professional organizations falls in a gray area for the law. If the SME did not advertise for conventions, sell books etc., we could send out the notices to our members at will. However, as an arm of the SME national organization, which DOES promote fee events and for-sale items, they have advised us that we should get you're your permission to send you the e-mails in order to make sure the SME complies with the law. Anyone who wants

to continue receiving our e-mail notices MUST reply to the e-mail that you want the SME to continue sending you the information, otherwise I will be required to drop your e-mail address from the our local list.

For those of you who are involved in this type of notification for other groups, our chair, Gordie Stevens, has received some information from the SME national concerning this issue, which I will fax or e-mail a PDF file to you on request.

**Rick Ackermann, Editor**  
[rackermann@patrickengineering.com](mailto:rackermann@patrickengineering.com)

Check out the

### **Northwest Mining Association**

web site at

<http://www.nwma.org/>

Found via a link on the Northwest Mining Association (NWMA) web site: **A web site worth noting in an election year:**

<http://www.activistcash.com/index.cfm>

This site tracts activist charitable groups & foundations and where the money goes. For an interesting election year read, click on “foundations” and go to the Pew Charitable Trust and note their largest beneficiary, the activist group Tides Foundation. A check of the information on Tides brought up an interesting connection in an election year; Tides connection to Teresa Kerry, John Kerry's wife and her foundation, Heinz Endowments. It is worth following the links and reading.

Foundations: Pew Charitable Trusts  
Heinz Endowments  
Activist Groups: Tides Foundation &  
Tides Center

*The Editor*

**REMEMBER - Call in your meeting reservation by Friday October 15th to Gordie at 630-795-7429 or Rick at 630-795-7246 You can also respond via reply to the e-mail announcement. Include your choice of entrée.**

## 2003-2004 Chicago Section SME Officers

<b>Chairman</b>	<b>Gordie Stevens</b> Patrick Engineering, Inc. Lisle, IL 630-795-7429 Fax 630-434-8400 gstevens@patrickengineering.com	<b>GEM Coordinator</b>	<b>Anne Leslie</b> Raimonde Drilling, Inc. Chicago, IL 708-583-9290 Fax 708-583-9491 rdcdrill@rdc-drill.com
<b>Vice-Chairman</b>	<b>John Head</b> Continental Placer, Inc. Wheaton, IL 630-407-0800 x 103 Fax 630-407-0799 jhead@continentalplacer.com	<b>Newsletter Editor</b>	<b>Rick Ackermann</b> Patrick Engineering, Inc. Lisle, IL 630-795-7246 Fax 630-434-8400 rackermann@patrickengineering.com
<b>Secretary</b>	<b>John Magyar</b> International Mining Services Belvidere, IL 815-547-9211 Fax 815-547-8552 imsjjm@aol.com	<b>Website Coordinator</b>	<b>Sarah Schlichholz</b> Continental Placer, Inc. Wheaton, IL 630-407-0800x109 Fax 630-407-0799 sschlic@continentalplacer.com
<b>Treasurer</b>	<b>Steve Tivy</b> Boncosky Oil, Inc. Elgin, IL 847-741-2577 Fax 847-741-2590 svtivy@comcast.net	<b>Program Chairman</b>	<b>Frank Kendorski</b> Agapito Associates Chicago, IL 630-792-1520 Fax 630-792-1580 frank@agapito.com

***SME Chicago Section Membership Dues Form***

*Note: 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:** \_\_\_\_\_ @ \_\_\_\_\_

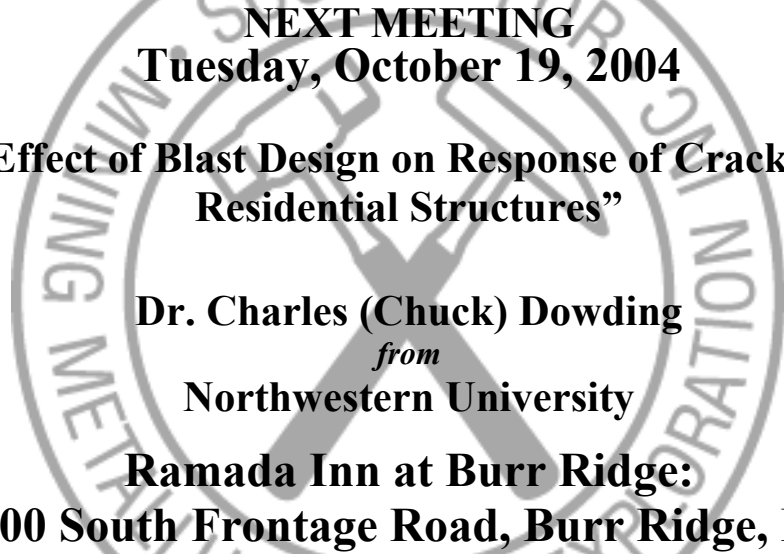
**CITY, STATE, ZIP + 4:** \_\_\_\_\_

**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: Steve Tivy, Treasurer, Chicago Section of SME, Boncosky Oil Inc., 739 North State Street, Elgin, IL 60123



**NEXT MEETING**  
**Tuesday, October 19, 2004**

**“Effect of Blast Design on Response of Cracks in Residential Structures”**

**Dr. Charles (Chuck) Dowding**  
*from*  
**Northwestern University**

**Ramada Inn at Burr Ridge:**  
**300 South Frontage Road, Burr Ridge, IL.**

Editing, Paper, Copying, Stapling, and Grunt Work Patrick Engineering, Inc. THANKS!

Rick Ackermann  
Newsletter Editor, Chicago Section SME  
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