

**GEOPHYSICAL TECHNOLOGIES FOR DETECTING UNDERGROUND COAL MINE VOIDS: An Interactive Forum**  
Registration Fee: \$150 Advance registration is recommended.

Name \_\_\_\_\_ Name for Badge \_\_\_\_\_

Company/Affiliation \_\_\_\_\_

Business Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone ( ) \_\_\_\_\_ Fax ( ) \_\_\_\_\_ E-Mail \_\_\_\_\_

**I will attend the Reception Monday evening 7/28**  yes  no  **I prefer a vegetarian lunch**

**Method of Payment:** Payment due with registration. **Forms may be faxed using a credit card to 859-257-2173**  
Checks payable to: University of Kentucky (UK's Federal Tax ID Number is 61-6001218)

Charge \$ \_\_\_\_\_ to my  Visa  MasterCard  American Express  Discover

Cardholder's Number: \_\_\_\_\_ Cardholder's Name \_\_\_\_\_

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**Mail to:**  
UK/OISTL  
107 Mining & Mineral Resources Bldg.  
Lexington, KY 40506-0107

**Cancellation** with refund (less \$25 processing fee) is available until July 21.  
No refunds after July 21. Substitutions may be made at any time.  
Please notify us in advance.

**Questions?** Contact Geaunita Caylor at 859-257-2820, Fax 859-257-2173, or email [gcaylor@engr.uky.edu](mailto:gcaylor@engr.uky.edu)

University of Kentucky/OISTL  
107 Mining & Mineral Resources Building  
Lexington, KY 40506-0107

An Interactive Forum

# GEOPHYSICAL TECHNOLOGIES FOR DETECTING UNDERGROUND COAL MINE VOIDS

July 28-30, 2003

Hyatt Regency Lexington - Lexington, Kentucky



# Geophysical Technologies for Detecting Underground Coal Mine Voids

## An Interactive Forum

July 28 - 30, 2003

**Purpose:** The purpose of the interactive forum, sponsored by the Mine Safety and Health Administration and the Office of Surface Mining, will be to evaluate the applicability and effectiveness of available geophysical technologies for detecting, locating, and delineating active and inactive underground coal mine workings.

### Monday, July 28, 2003

6-8:00 p.m. **Registration and Reception**  
Patterson Ballroom, Hyatt Regency Lexington

### Tuesday, July 29, 2003 Day One: BASICS

7:30 a.m. Registration and Continental Breakfast  
Patterson Ballroom

8:30 a.m. **Introduction and Purpose of Forum**  
*William Kovacic, Lexington Field Office Director  
Office of Surface Mining*

8:45 a.m. **Featured MSHA Speaker**  
*Dave Lauriski, Assistant Secretary, MSHA (invited)*

**Session Moderator:** *Vann Weaver, Chief, Technology & Support Group, Office of Surface Mining*

9:15 a.m. **Technology Opportunities for Coal Mining**  
*Richard Sweigard, Chairman, Department of Mining Engineering, University of Kentucky*

9:45 a.m. Break

10:30 a.m. **DOE's Program on The Mining Industry of the Future**  
*Roy Tiley, Research Analyst  
BCS, Inc.*

11:00 a.m. **OSM Perspective**  
*John Craynon, Chief, Division of Technical Support  
Office of Surface Mining*

11:30 a.m. **MSHA Perspective**  
*Kelvin Wu, Chief, Mine Waste and Geotechnical Engineering Division, MSHA*

12:00 Noon **Featured OSM Speaker**  
*Jeffrey Jarrett, Director  
Office of Surface Mining (invited)*

**Session Moderator:** *Kelvin Wu, Chief, Mine Waste and Geotechnical Engineering Division, MSHA*

1:30 p.m. **Overview of Geophysical Methods**  
*Don Steeples, Professor of Geology  
University of Kansas*

2:30 p.m. **Selection of Geophysical Methods**  
*Neil Anderson, Professor of Geology  
University of Missouri-Rolla*

3:00 p.m. Break

3:30 p.m. **Quality Control**  
*Gary Olhoeft, Professor of Geophysics  
Colorado School of Mines*

4:00 p.m. **Panel Discussion**  
*Neil Anderson, John Craynon, Gary Olhoeft,  
Don Steeples, Richard Sweigard, Roy Tiley,  
and Kelvin Wu*

5-6:30 p.m. **Hospitality Hour and "Open Door" to University of Kentucky Basketball Museum**

### Wednesday, July 30, 2003 Day Two: SPECIFICS

7:30 a.m. Continental Breakfast

**Session Moderator:** *Doug Conaway, Director  
WV Miner's Health Safety and Training*

8:30 a.m. **Surface Seismic Methods**  
*Lawrence Gochioco, GX Technology Corporation*

9:00 a.m. **Electrical Resistivity**  
*William Johnson, D'Appolonia Engineering*

9:30 a.m. **Ground Penetrating Radar**  
*Mike Trevits, Research Physical Scientist  
National Institute of Occupational Safety and Health*

10:00 a.m. Break

**Session Moderator:** *Gary Slagel, Director, Governmental Affairs  
Consol Energy, Inc.*

10:30 a.m. **Tomographic Methods**  
*Ernest Majer, Deputy Director, Earth Sciences Division  
Lawrence Berkeley National Laboratory*

11:00 a.m. **Electromagnetic Methods and Radio Imaging Methods for Detecting Coal Mine Voids**  
*Larry Stolarczyk, President & Chief Technology Officer  
Stolar Horizon Research Corporation and  
Syd Peng, Chairman, Department of Mining Engineering  
West Virginia University*

11:30 a.m. **Airborne Electromagnetic Surveys**  
*Richard Hammack, NETL*

12:00 Noon **Lunch**

**Session Moderator:** *Benny Wampler, Deputy Director  
VA Department of Mines Minerals and Energy*

1:00 p.m. **Microgravity**  
*Richard Benson, President, Technos, Inc.*

1:30 p.m. **Directional Drilling**  
*John Wood, Vice-President, Marketing  
Target Drilling, Inc.*

2:00 p.m. **Quecreek Surface Seismic**  
*James Acker, SEISPROS*

2:30 p.m. **Panel Discussion - James Acker, Richard Benson, Lawrence Gochioco, Richard Hammack, William Johnson, Steven Kravits, Ernest Majer, Syd Peng, Larry Stolarczyk, Mike Trevits and John Wood**

3:00 p.m. Break

**Session Moderator:** *James Cobb, State Geologist and Director  
Kentucky Geological Survey*

3:30 p.m. **Forum Summary**  
*Dwain Butler, Senior Research Geophysicist (Retired)  
U.S. Army Engineering Research & Development Center*

4:30 p.m. **What's the Next Step?**  
*Greg Conrad, John Craynon, and Kelvin Wu*

5:00 p.m. **Adjournment**

**Registration and Lodging:** The registration fee of \$150 includes continental breaks, lunches, receptions, and proceedings on CD-ROM. The headquarter hotel is the **Hyatt Regency Lexington** ([www.lexington.hyatt.com](http://www.lexington.hyatt.com)), and is located at 400 West Vine Street in downtown, Lexington. A block of rooms has been reserved until June 28 for \$65 single and \$90 double (plus 12.4% tax). Please contact the Hyatt Regency directly at 859-253-1234 or 800-233-1234 and ask for the room block for the "Coal Mine Voids Forum." Reservations after June 28 will be accepted on a space-available basis only. The Hyatt Regency has shuttle service to and from Bluegrass Airport, with a courtesy phone available at the airport. For other local hotel information, contact Geaunita Caylor at 859-257-2820 ([gcaylor@engr.uky.edu](mailto:gcaylor@engr.uky.edu)), or go to: [www.visitlex.com](http://www.visitlex.com).

**Exhibits:** A limited number of exhibit spaces are available. Please contact Ms. Caylor for additional information.