MINING HEALTH & SAFETY
INTERNATIONAL SYMPOSIUM

APRIL 7-8, 2011
Charleston Civic Center
Charleston, WV

WHEELING JESUIT UNIVERSITY
Dear Symposium Attendees:

Wheeling Jesuit University’s National Technology Transfer Center (NTTC) is proud to welcome you to the Fourth International Mining Health & Safety Symposium.

This Symposium brings together industry leaders, government officials, legislators, technology specialists, manufacturers, members of academia and miners and their families. It is our hope that Symposium participant discussions will lead to mine safety and health improvements, technological advances and new/revised policies and practices aimed to better protect the men and women who work in mines throughout the world.

The year 2010 was a tragic one for the mining community both in the United States and abroad. Just a little more than a year ago, 29 men lost their lives in the April 5th explosion at the Upper Big Branch mine --America’s most deadly mining disaster in forty years. Internationally, disasters occurred in China, New Zealand, Chile, Turkey and Russia. To date, in 2011, four American miners have perished and mining disasters have occurred in Colombia, China and Pakistan.

During the 21st Century’s first eleven years, the number and frequency of mining deaths and disasters is both shocking and unacceptable. For the mining industry to prosper and move forward, we, as a community, must consistently do a better job of protecting the men and women who work in mining throughout the world. It is our foremost hope that this Symposium will serve as a productive step toward achievement of that goal.

I wish to thank all who support the International Mining Health & Safety Symposium, specifically the National Institute for Occupational Safety and Health and the late Senator Robert C. Byrd and those who share the vision of safer mines in this country and around the world.

Sincerely,

J. Davitt McAteer
Vice President for Sponsored Programs
Wheeling Jesuit University

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2010 International Mining Disasters/Rescues

- March 15 - China - A fire at the Dongxing coal mine resulting in 25 miner deaths
- March 28 – China - Underground water flooded the Wangjialing coal mine in Shanxi province, killing 153 miners (One hundred others escaped). [According to press accounts, 2,433 men died in 2010 in Chinese coal mines, an average of six men per day]
- April 5 – United States – Upper Big Branch, Massey Energy mine exploded killing 29 miners
- May 8 - Russia - A methane explosion at the Raspadskaya mine in Kemerovo, Oblast resulted in 66 deaths and 99 injured miners
- May 17 – Turkey - A firedamp explosion at the Karadon coal mine killed 30 miners
- August 5 – Chile - 33 miners rescued following a cave-in at the San Jose copper/gold mine in Chile

2011 International Mining Disasters

- November 19 - New Zealand - Twenty-nine miners lost their lives at the Pike River mine as the result of multiple explosions which occurred several days after the initial explosion
- January 26 - Columbia – 20 miners were killed at the La Preciosa Coal Mine in Sardinata from an explosion and cave-in
- March 20 - Pakistan - In the Balochistan Province, Pakistan, 45 confirmed dead, 52 feared dead after a methane gas explosion (According to press accounts, the operator was asked to shut down the mine two weeks prior because of accumulation of methane gas But, the warning was ignored)
- March 24 - China – 11 men were killed in the Jonggou Coal Mine in Baishan City, from a methane explosion
**Day 1**

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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8 a.m.</td>
<td>Vendor Set-Up  &lt;br&gt;Please note: Vendor Set-Up is also available on Wednesday, April 6th from 4pm-8pm.</td>
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<td>9 a.m.</td>
<td>Registration/Vendor Exhibits Open</td>
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<td>9:30 a.m.</td>
<td>Welcome &amp; Opening Prayer/  &lt;br&gt;Moment of Silence  &lt;br&gt;<strong>Father Jim Fleming, SJ</strong>, Vice President &amp; Chief of Staff, Wheeling Jesuit University</td>
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<td>9:45 a.m.</td>
<td>Opening Remarks &amp; Introductions  &lt;br&gt;<strong>Davitt McAteer</strong>, Vice President of Sponsored Programs, Wheeling Jesuit University</td>
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<td>10 a.m.</td>
<td>Panel 1 Discussion – Upper Big Branch (UBB) Mine Disaster  &lt;br&gt;<strong>Moderator:</strong> <strong>Joe Sbaffoni</strong>, Director, PA DEP  &lt;br&gt;Bureau of Mine Safety  &lt;br&gt;<strong>Kevin Stricklin</strong>, Administrator, Coal Mine Safety &amp; Health, Mine Safety &amp; Health Administration  &lt;br&gt;<strong>Jim Beck</strong>, Project Director, National Technology Transfer Center at Wheeling Jesuit University &amp; UBB Underground investigator, Governor’s Independent Team  &lt;br&gt;<strong>Davitt McAteer</strong>, Vice President of Sponsored Programs, Wheeling Jesuit University &amp; UBB Lead Investigator, Governor’s Independent Team  &lt;br&gt;<strong>Bill Tucker</strong>, Administrator of Enforcement, WV Office of Miners’ Health, Safety &amp; Training  &lt;br&gt;<strong>Leon Muscalink</strong>, Miners’ Representative, United Mine Workers of America  &lt;br&gt;<strong>Massey Energy representative</strong> (Invited)</td>
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<td>11:30 a.m.</td>
<td>Vendor Exhibits Open</td>
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**2011 United States Mining Individual Fatalities**

- **January 27 - West Virginia**: 19-year-old red hat killed in the Baylor Mining, Jim Branch #3B mine
- **February 3 - West Virginia**: 49-year-old miner killed at the Consol Energy McElroy Mine
- **February 11 – Arizona**: 55-year-old killed at the Peabody Western Coal Company, Kayenta Mine
- **February 11 – Kentucky**: Continuous miner operator killed at the Matrix Energy, LLC #1 Mine in Kentucky

**Noon**

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**1 p.m.**

**Breakout Sessions**

- **The Approval & Certification Process** -  <br>**Dave Chirdon**, New Technology Program Manager, Approval & Certification Center, Mine Safety & Health Administration
- **Lung Health of US Coal Miners in 2011: Problems & Solutions** -  <br>**Lee Petsonk, Ph.D.**, Professor of Medicine, Section of Pulmonary & Critical Care Medicine, School of Medicine, West Virginia University

**WV Room 104**

**1:45 p.m.**

**Mine Safety/Emergency Best Practices – International Practices & Recent Experiences: Upper Big Branch, China, New Zealand, Chile, Ukraine and South Africa**

- **Christo de Klerk**  <br>General Manager, Mine Rescue Services, South Africa
- **Celeste Monforton, MPH, Ph.D.**  <br>Professorial Lecturer, School of Public Health & Health Services, George Washington University

**2:30 p.m.**

**Vendor Exhibits Open**

**3 p.m.**

**Panel 2 Discussion – Mine Disaster Response (mine rescue notification & coordination, incident command center, mine rescue teams, rescue equipment, communications, lighting/visualization equipment, gas detection & monitoring, robotics)**

**Moderator:** **Jim Dean**, Director, Mining & Industrial Extension Department, College of Engineering & Mineral Resources, West Virginia University

**Kevin Stricklin**, Administrator, Coal Mine Safety & Health, Mine Safety & Health Administration

**Dan Spratt**, Mine Rescue Coordinator, WV Office of Miners’ Health Safety & Training

**John Urosek**, Chief, Mine Emergency Operations, Mine Safety & Health Administration

**4 p.m.**

**Upper Big Branch Victims Memorial Service**

**Capt. Jim Mitchell**, Chaplain, WV State Police  <br>**Rev. Dennis D. Sparks**, Executive Director, WV Council of Churches
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| 8:30 a.m. | Welcome & Introductions  
Celeste Monforton, MPH, Ph.D Professorial Lecturer, School of Public Health and Health Services, George Washington University  
Senator Jay Rockefeller, United States Senate (West Virginia) – Via Video |
| 8:45 a.m. | Panel 1 Discussion – Mine Emergency Technologies  
(coal dust, rock dust, methane, communication systems, SCSR improvement efforts, caches, shelters, lights, personal tracking devices, include mine rescue in the 21st century, personnel tracking, approved systems, tested systems, demonstration programs, etc.)  
Moderator: Carl Baisden, Director of Mine Training & Energy Technologies, Southern West Virginia Community & Technical College and Chief, Mine Rescue, WV Task Force 1  
Dave Chirdon, New Technology Program Manager, Approval & Certification Center, Mine Safety & Health Administration  
Randall Harris, Engineering Advisor, WV Office of Miners’ Health, Safety & Training  
Virgil Brown, Specialist, Mine Emergency Unit, Mine Safety & Health Administration  
David Snyder, Senior Mine Electrical Engineer, National Institute for Occupational Safety & Health |
| 10 a.m.   | Vendor Exhibits Open |
| 10:30 a.m. | Panel 2 Discussion – Industry & Labor Perspective on the Future  
Moderator: Davitt McAteer, Vice President, Sponsored Programs, Wheeling Jesuit University  
Brett Harvey, Chairman & CEO, CONSOL Energy  
Cecil Roberts, President, United Mine Workers of America  
Rick Whiting, President & CEO, Patriot Coal |
| Noon      | Lunch (on your own) |
| 1 p.m.    | Panel 3 Discussion – Mine Safety & Health in the 21st Century - The First Decade: Domestically & Internationally  
Moderator: Pat McGinley, J.D., Professor, School of Law, West Virginia University  
C.A. Phillips, Acting Director, WV Office of Miners’ Health Safety & Training  
Kevin Stricklin, Administrator, Coal Mine Safety & Health, Mine Safety & Health Administration |
| 2:30 p.m. | Closing Remarks – Davitt McAteer  
Vice President, Sponsored Programs, Wheeling Jesuit University |

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is a leader in academics and athletics, with a rich tradition of making high-quality private education accessible. With more than 30 undergraduate and six graduate programs to choose from, Wheeling Jesuit offers students an education for life, leadership, and service, providing the foundation to succeed in a career or in graduate school. Many of the Catholic university’s programs have 100 percent placement rates in graduate programs across the country. Since 1995 U.S. News & World Report has ranked Wheeling Jesuit University among the top institutions in its “Best Master’s Universities in the South” category.

The Robert C. Byrd National Technology Transfer Center at Wheeling Jesuit University • www.nttc.edu

links U.S. industry with federal labs and universities that have the technologies, facilities, and researchers that industry needs to maximize product-development opportunities. Established by Congress in 1989, the NTTC offers technology assessment services and develops lasting partnerships among industry, academia, and government agencies.
GREETING FROM JOE MANCHIN III
UNITED STATES SENATOR

On behalf of the citizens of the Mountain State, and as your United States Senator, it is my distinct honor to send greetings to the attendees of the Fourth International Mining Health and Safety Symposium.

This two day event brings together leaders from the mining industry, labor and government to exchange ideas and develop innovative solutions for today’s coal mining challenges. I thank Wheeling Jesuit University's National Technology Transfer Center and National Institute for Occupational Safety and Health for making this event possible.

Mining safety has always been and remains my utmost concern. We must constantly push forward when it comes to safety, pursuing technological advancements and innovations that every single miner deserves. After all, individuals who go to work each morning to provide a living for themselves and their family should expect nothing less than to return home safely.

West Virginia is a proven leader in energy, and our coal built this great nation and will power us into the future. Coal is an affordable and dependable energy resource, and West Virginia's dedicated and courageous miners do their work better than anywhere else.

Coal keeps our lights on and helps us meet our energy needs, and West Virginia coal miners help sustain our way of life. That is why this symposium is important, because it brings us together to formulate new ideas and look for ways to improve our current mining conditions.

With warmest regards,

Joe Manchin III
United States Senator