Innovations in Mining Engineering
Aug. 30 - Sept. 1, 2011
Havener Center, Missouri S&T

Research Advances and Technological Innovations for the Mining Industry of the Future.

Themes
- Novel Mining Methods
- Mine Production Engineering
- Ground Control and Safety Engineering
- Drilling, Blasting and Demolition
- Sustainable Development
- Mine Economics and Financing
- Mineral, Materials and Coal Processing

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Taggart’s proven and innovative EPC solutions deliver increased efficiencies to clients worldwide in the areas of design, construction, commissioning and operation of mineral processing plants, bulk material handling facilities, ports and terminals, shipping and storage systems and many more. Call or visit our website to learn how Taggart can help accelerate your return on investment and execute your projects on-time and on-budget.
Meeting the Technological Innovations and Global Talent Challenges of the Future Mining Industry:

On behalf of Missouri S&T and the Development Board, we would like to welcome you to the 2011 Innovations in Mining Engineering Conference (IME 2011). The IME 2011 Conference brings together top industry executives and professionals, and faculty and students to discuss relevant issues on the theme, “Innovations in Mining Engineering – Advancing and Deploying Technologies for Safer and Productive Operations.”

Throughout its history, the mining industry has continuously met its defining challenges and responded to the needs of the global community. The industry continues to produce resources for technological innovations, industrial growth, knowledge and frontier advances, and the development of societies for the survival and comfort of humanity.

Today, more than ever, the industry faces tough technological, environmental, safety and health, workforce readiness and sustainable development challenges. The workforce readiness challenge has become more critical given the erosion of the capacity of global universities to educate mining engineers and other resource engineers and scientists.

Chris Curfman, President of CAT Global Mining and the Conference General Chair, will open the conference with a keynote address entitled, “Mining Safely! Mining More! Mining Right!” The conference will deliver on two key issues – technological innovations and the global talent for the mining industry of the future.

Enjoy the conference and please communicate to the Technical Committee your thoughts for future conferences.

Dr. Samuel Frimpong and Paul A. Lang, Co-Chairs, Conference Technical Committee

Conference Schedule ............... pp. 6-7

Executive Forum Speakers

Forum I
Jeffrey A. Roschlyk
Vice President
P&H Mining Company

Bryan Gaff
President – International Coal Sales
Peabody Energy

Nick Auden
Vice President Joint Ventures & Indirect Bus.
Orica, Inc.

Mark Bartlett
Manager for Technologies
Freeport McMoran

Cory Cook
Vice President
Immersive Technologies

Forum II
Andy Slentz
Sr. Vice President
Peabody Energy

Leigh Freeman
General Manager
Downing Trail, Inc.

Samuel Frimpong
Professor and Chair
Missouri S&T

Chris Gibbs
Sr. Director, Org. Dev & Ag, Head, Global HR
Barrick Gold, North America

Richard Marston
President and Principal Consultant
Marston & Associates, Inc.

Your mine operation is a marvel of engineering and tight cost management. You make daily – sometimes hourly – adjustments to your mine plan based on variables within and beyond your control. You require equipment that’s reliable and productive. P&H Mining Equipment provides tough, smart mining solutions inspired by tough, smart mine operations – and supported by our global network of P&H Mining Service teams.

www.minepro.com
www.phmining.com
Peabody Energy is growing, global and green. We are the world’s largest private sector coal company, following a decade when coal has been the fastest-growing fuel. Peabody is a global leader in clean coal solutions. Coal reliably fuels half of our electricity at a fraction of the cost of competing sources.

Peabody is a proud supporter of Missouri University of Science and Technology’s 2011 Innovations in Mining Conference.

We Dig Great People

At Arch Coal, we dig deep to find the best and brightest talent to join our growing team. As one of the world’s largest and most progressive coal producers, we operate 24 high-tech mining complexes across the United States. You can develop a rock solid career with a wide range of advancement opportunities among some 7,400 positions.

Join an energy leader. Join Arch Coal.
Maintaining the integrity of walls is integral to the safe operation and recovery of metalliferous deposits. With the right blasting technology, you can also benefit from lower stripping ratios, reduced risk and wall rehabilitation costs, and increased production.

At Orica, we use our Global R&D and technical capability to find solutions to the challenges you face every day. You can see the results with our Electronic Blasting Systems, Variable Energy Bulk Systems and Packaged Products – modeled with our sophisticated wall control capabilities and Advanced Vibration Management. That’s the power of partnership.
Introducing a new lead production process that changes everything.

We’re changing everything, starting with how Missouri’s lead can be turned into metal. After more than a decade of research and four years of demonstration plant operations, we’re on the verge of commercializing a breakthrough technology. This technology produces lead metal in a cleaner, safer and efficient manner by replacing traditional high-heat-based smelting with a wet chemical and electrowinning process.

Results are unparalleled: greater than 98 percent metal recovery while nearly eliminating sulfur dioxide and lead air emissions. Our proprietary process delivers on our desires for cleaner communities, environmental stewardship and supplying products that help power the world.

As a Missouri-based company, we’re eager to introduce the technology here, and have identified Herculaneum, Mo., as the location for our potential commercial site.

Some see this as the near completion of our goal. We see it as demonstration that we’re changing everything.
**MINING ENGINEERING CONFERENCE**
**AUG. 30 - SEPT. 1, 2011**
**MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**INNOVATIONS IN MINING ENGINEERING 2011**

**Monday, August 30, 2011**

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<tr>
<th>Time</th>
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<th>Speaker/Presenter</th>
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<td>1:45 - 2:15 PM</td>
<td>MINING ENGINEERING CONFERENCE</td>
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**Tuesday, August 31, 2011**

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**Wednesday, August 31, 2011**

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<td>3:30 – 5:00 PM</td>
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**CONFERENCE SCHEDULE**

**Wednesday, August 31, 2011 (continued)**

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**Thursday, September 1, 2011**

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<td>10:00 AM – 1:30 PM</td>
<td>EXECUTIVE FORUM II – Global Talent for Tomorrow’s Mining Industry St. Pats A/B</td>
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<td>1:30 PM – 2:00 PM</td>
<td>CLOSING REMARKS/CONFERENCE ADJOURNS St. Pats C</td>
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