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POLAND

2ND CIRCULAR

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# 2<sup>nd</sup> CIRCULAR 21<sup>st</sup> World Mining Congress & Expo 2008

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### Dear Friends,

There are only a few months left until the opening session of the 21<sup>st</sup> World Mining Congress, which after 50 years will be held in Poland again. During this time we plan to systematically inform all potential participants of the progress of the organisational works.

The 21<sup>st</sup> World Mining Congress will be held in Krakow, but sessions will also be organised in other cities directly involved in mining activities, that is in Katowice, Lubin, Bełchatów and Wieliczka. In the first of these three cities we will offer Congress participants a chance to familiarise themselves with the experiences and the problems of the Polish mining industry by organising technical visits to the mines, whereas the trip to Wieliczka will be a travel in time on the one hand and provoke thoughts on the role and significance of the monuments of former mining magnificence in the culture of today's society on the other.

Krakow is one of the most attractive tourist destinations. It is a place where tradition becomes intertwined with the present. An event presenting the mining traditions of many European countries, which will be held in the Krakow Main Square – the most important and most beautiful public space in the city and the largest market square of medieval Europe – will recall those wonderful traditions. The Congress will take place in this magnificent city, a city, which Carlos Fuentes – a certain candidate for the Nobel Prize – said, is the most beautiful city in the world and a city, which many call "magical". Congress participants will have a chance to visit one of the most beautiful mining museums in the world, which is the celebrating its 30<sup>th</sup> anniversary of being entered on the UNESCO World Heritage List of Cultural and Natural Treasures – the Wieliczka Salt Mines.

Krakow has always drawn, and still draws, exceptional people. Many of them have left here their unique works and cultural masterpieces. We shall meet for a few days of debates in satellite sessions, which will be held in "Auditorium Maximum" – the new lecture theatre complex of the Jagiellonian University, which means that we will be debating in the most modern venue of one of the oldest European universities, a university attended by Mikołaj Kopernik, John Paul II and many other extraordinary Poles. The plenary sessions will be a review of the achievements, trends and forecasts for the various branches of the mining industry. I believe that now, in the early 21st century, they will be a necessary compendium of knowledge of this branch of the economy, which for ages shaped the face and the form of our civilisation.

In this circular we will present only a few of our targets. I believe that by participating in the events accompanying the Congress you will demonstrate the solidarity and friendship of miners from around the globe. Those bonds have been formed and built up for centuries and are strengthened by joint efforts to combat the dangers thrown our way by nature, protecting its reserves. We shall continue this difficult struggle not forgetting, however, future generations, for which we shall leave some of nature's treasures.

To paraphrase Paulo Coelho, one of the most famous contemporary writers, I can only say: "I believe, that by coming to the Congress you shall enter the fast flowing river, which will take you to places you never knew existed".

Chairman of the 21<sup>st</sup> World Mining Congress Organizing Committee

**Jerzy Kicki** 

#### The Republic of Poland is located in

Central Europe with a coastline on the Baltic Sea. Neighbouring countries: Germany to the west, the Czech Republic and Slovakia to the south, Belarus and Lithuania to the east and Russia to the north. Poland also has a maritime border with Denmark and Sweden.

Constitution: Constitution of the Republic of Poland

Official language: Polish

Capital: Warsaw

Political system: parliamentary democracy Head of State: President of the Republic

of Poland Lech Kaczyński

Head of Government: Prime Minister Donald Tusk Speaker of the Sejm (lower house of parliament):

Bronisław Komorowski

Area

total 322,575 km² (68th)

Population (2007)

- □ total 38,126,000 (32<sup>nd</sup>)
- population density 122/km²
- □ nationality Poles: 96,7%

Membership: European Union, NATO, UN, OECD, WTO, Visegrád Group, Weimar Triangle, G6, G20 as EU member, OSCE, CENELEC, Council of the Baltic Sea States, Central European Initiative and many other international organizations

Religion: predominantly Roman-Catholic

Currency: złoty (PLN, zł)

Time zone: UTC +1 – winter; UTC +2 – summer

ISO 3166 Code: PL Internet TLD: .pl Automobile code: PL Calling code: +48

Source: Wikipedia

### POLAND – Essential Information



#### **Climate**

Poland has a temperate climate and lies in a zone of transition between an oceanic and a continental climate. The average yearly temperature in Poland oscillates from between 5°C and 7°C in the Pomeranian and Masurian Lakelands and in the highlands to between 8°C and 10°C in the subcarpathian valleys and in the Silesian and Greater Poland lowlands. Poland has six seasons: it is "richer" than other European countries in that it has an early-spring and an early-winter season.

#### **Visa policy in Poland**

A visa is the basic mode for granting permission to enter the country under Polish law. People from many countries will not need a visa if they wish to visit Poland as tourists. Among these are all citizens of the European Union's member states.

## Countries whose citizens may travel to Poland without a visa (for a period of 90 days):

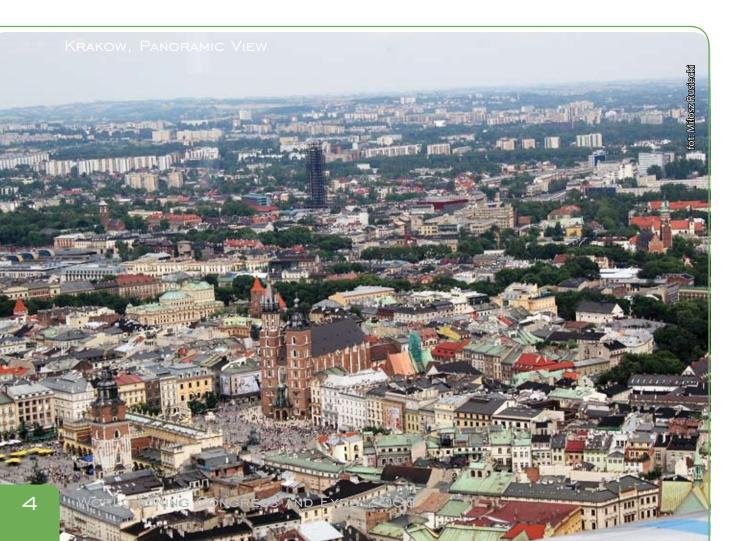
Andorra, Argentina, Australia, Austria, Belgium, Brazil, Brunei, Bulgaria, Canada, Chile, Costa Rica, Croatia, Cyprus, Czech Republic, Denmark, El Salvador, Estonia, Finland, France, Germany, Greece, Guatemala, Honduras, Hong Kong (Special Administrative Region), Hungary, Iceland, Ireland, Israel, Italy, Japan, Latvia, Liechtenstein, Lithuania, Luxembourg, Macao (Special Administrative Region), Malaysia, Malta, Mexico, Monaco, Netherlands, New Zealand, Nicaragua, Norway, Panama, Paraguay, Portugal, Romania, San Marino, Singapore, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, United Kingdom, United States of America, Uruguay, Vatican (Holy See), Venezuela.

More information can be found on the Ministry of Foreign Affairs' internet site: www.msz.gov.pl

### The Congress City KRAKOW

**Krakow** – to give it its full name: The Royal Capital City of Krakow, by many considered to be the cultural and spiritual capital of Poland – has a centuries long and rich history. The location of the city is connected with many legends. The name of the city, according to the legend written down at the end of the 12th Century by the chronicler Wincenty Kadłubek, stems from the name of Prince Krak, the legendary ruler of Poland, who resided in the castle he built on the top of the Wawel Hill and who founded a fortified town called Krakow in the vicinity of the castle. The uniqueness of Krakow is not easy to explain to those, who have not visited the city. This exceptional quality of the city is associated in the first place with a unique cultural heritage realised in the buildings of the city. This was the place, where in the year 1000 the Roman Catholic diocese was established. As Krakow was the country's capital between the 11th and 17th centuries, so this was the place where the castle in which Polish kings resided was built on the top of the Wawel Hill, which was at the same time the site of kings' coronations and their burying place. This is also the city where the Krakow Academy – the first Polish university

(currently the Jagiellonian University) – was founded in 1364. The face of the city changed throughout the centuries. In the Middle Ages Krakow was a safe, rich and fortified city surrounded by city walls adorned by 55 watch towers (some of the city fortifications have been preserved until today). During Renaissance times Krakow was the centre of progressive thought and culture, drawing the most brilliant humanists, writers, architects and musicians. Up until the 17<sup>th</sup> century Krakow was the state capital. And even a few centuries later, in times of economic crisis during the modern era, Krakow was the place where nearly all the Polish artistic elite could find a safe heaven. An interesting fact – the life of the city was always concentrated around the city's Main Square – the second most important European forum after St Mark's Square in Venice. In Krakow tradition is closely intertwined with modern times and nearly every stone has its history. The personification of these historical times can be found in nearly 6 thousand historic buildings from all epochs. The "mobile" supplements to these historic buildings are nearly 2.5 million art works, which can be found in Krakow's





museums, churches and archives. Thanks to this unique concentration of cultural achievements the city was entered on the list of the 12 sites forming the UNESCO World Heritage List. It is impossible to list all the tourist attractions of the city. It is, however, certain that everyone will be able to find his or her own "magical" Krakow. While some may follow Mikołaj Kopernik, others may be interested in places associated with John Paul II. One may be enchanted by the unique underground corners of the XVII century salt mine in Wieliczka, another may spend long hours ambling through the streets of the old Jewish Quarter – Kazimierz and yet another may become enchanted by the beauty of the Wit Stwosz altar in St. Mary's Basilica.

Taking advantage of its geographical location, Krakow aims to be a meeting place for different cultures and nations. It successfully aspired to being a Central European metropolis, a city of culture, art and science. 17 tertiary education institutions have their seats in Krakow. Numerous brilliant artists live in Krakow and the list of the city's cultural events and festivals is also impressive. The culmination of these cultural events was the year 2000, during which Krakow was proud to hold the name of European City of Culture, awarded to the city by the EU Council of Ministers.

Source: www.krakow.pl



# KRAKOW – Essential Information

**KRAKOW** lies in southern Poland on the banks of the Vistula River.

#### Access

#### **Transit**

Krakow is an important communications hub. National roads 4, 7, 44, 79 and 94 cross through Krakow. The A4 Expressway passes along the southwest of the city.

#### **Airports**

John Paul II International Airport in Krakow is the second-busiest airport in Poland. The airport has one 2550-meter-long take-off/landing strip and is located in Balice, 11 km west of the centre of Krakow. Also, it is still used jointly as a military air base. John Paul II Airport has connections to more than 59 cities in the world and has two terminals: T1 for international and T2 for national flights. It is also the only Polish airport with a direct rail connection to the centre of the city (by DMU).

#### **Municipal transportation**

The first horse-drawn tramway route in Krakow opened in 1882 thus replacing the omnibus service that had been functioning for at least a dozen years previous. In 1927 the first bus route was established. Today buses circulate 74 urban day routes, 42 suburban routes, 8 night routes, 3 express routes and 6 temporary (auxiliary) routes. Kra-

kow's bus routes are assigned three-digit numbers. Tramways in Krakow are currently operated by the Krakow Municipal Transport Company S.A. They circulate 76 routes (day routes only, numbered with two-digit numbers from 1 to 40 and from 70 to 79 for temporary routes) covering a combined distance of 286 km. 198 tramway sets ("trains") composed of a total of 363 tram cars operate on routes composed of a total of 84 km of double track of which 2/3 are separated from the automobile lanes.

#### Climate

Krakow enjoys a temperate climate. Changes of weather occur quite frequently due to the collision of humid air masses from the Atlantic with dry continental ones from the east. The average yearly temperature oscillates between 6°C and 10°C. On average each year has 70 sunny days (i.e. 1702 hours of sunlight). The warmest month is August and the coldest January. June and July are the months with the most rainfall (average rainfall 100 mm and 177 mm respectively). The months with the least rainfall are September and October (13 mm and 30 mm respectively).

#### **Average September temperatures in Krakow:**

Maximum: 19.0°C / 65.8°F Minimum: 9.0°C / 47.5°F

Source: www.krakowlife.pl

KRAKOW, THE WAWEL HILL PANORAMIC VIEW



### **Congress Venue**

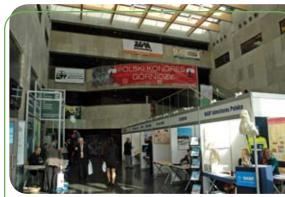
- Auditorium Maximum of the Jagiellonian University
- AGH University of Science and Technology in Krakow

The plenary sessions and the satellite sessions of the 21st World Mining Congress will be held at the Jagiellonian University Conference Centre (Auditorium Maximum) located in Krakow at 35 Krupnicza Street.

The Jagiellonian University Senate decided to commence the construction of the Auditorium Maximum complex in 2001. The development plan was to build a lecture theatre complex consisting of large, modern lecture theatres (an amphitheatrically arranged hall for 1200 listeners, which can be divided into two smaller lecture halls seating 600 listeners each; a hall housing 250 listeners, two halls housing 150 listeners and one hall for 100 listeners) as well as the necessary catering and sanitary facilities. The Auditorium Maximum was officially opened on 9 September 2005.

On December 19<sup>th</sup> 2006, the complex was awarded an honorary mention in the "Polish Cement in Architecture" architectural competition. The complex, which was erected in accordance with a design prepared by the "Wizja" architectural office, also received a special award for the use of bulk cement as a structural material.

AUDITORIUM MAXIMUM





AUDITORIUM

#### **AGH University of Science and Technology**

The AGH University of Science and Technology is a continuation of the traditions of the Mining Academy established by Stanisław Staszic in Kielce. The university works for the benefit of science, the economy and the community by educating students, increasing the number of research personnel and conducting scientific research.

The history of the AGH University of Science and Technology in Krakow commenced in 1912, when a group of prominent engineers and mining activists, led by Jan Zarański, began working towards obtaining a permit to establish in Krakow a tertiary education institution teaching mining engineers. AGH cares for its tradition and educates

its students to become wise and honourable people, caring for their professional responsibilities and being valuable members of society. The University works in line with its motto: "Labore creata, labori et scientiae servio" (Created by labour, I serve labour and science). Currently the AGH University of Science and Technology offers courses in 25 fields of study and in over 160 branches of learning. In total over 30,000 students are taught by nearly 2,000 scientific and educational personnel.



## **Congress Theme and Topics**



KRAKOW, CLOTH HALL

### The leading theme of the Congress

# NEW CHALLENGES AND VISIONS FOR MINING

#### **CONGRESS TOPICS**

- New underground mining methods and technologies
- □ The risks involved in mining
- Practices for educating mining engineers
- Mining hazards and hazard prevention
- Work safety in mining
- Information Technology in mining
- Sustainable development, mining environment
- □ Coal its role as an energy source the future for the coal mining industry
- Mine closures

#### **TOPICS OF THE SATELLITE SESSIONS**

- □ The 17<sup>th</sup> International Conference on Automation in Mining
- Economics, management and design in the mining industry
- Contribution of strata mechanics to mining technology and work safety
- Risk management in surface protection

#### **TOPICS OF THE OUTGOING SESSIONS**

- Coal mining chances and challenges
- Open pit mining trends and challenges
- Ore mining trends and challenges
- The mine as a witness to history and a monument of technology
- Legal aspects of mining activities

#### **CONGRESS LANGUAGES**

The official language of the Congress is English.

The plenary sessions will be translated simultaneously into Polish.

KRAKOW, THE MAIN SQUARE



### **Framework Program**

#### DAY 1

#### **SEPT. 7<sup>th</sup>, 2008 - SUNDAY**

12:00 pm - midnight - Registration in hotels

4:00 pm – Congress Opening, Auditorium Maximum,

Jagiellonian University, Krupnicza St. 35

Address by the President of Poland

Address by the Minister of the Economy

Address by the Mayor of Krakow

Address by the Mayor of Katowice

Address by the Mayor of Sosnowiec

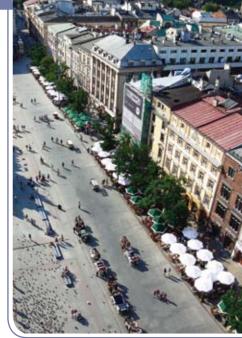
Address by the President of the World Mining Congress: "50 Years of the

World Mining Congress"

Opening of the Congress exhibitions

Performance by the "Śląsk" Song and Dance Ensemble

Welcome Party



Krakow, The Main Square, A-B Line

#### DAY 2

#### **SEPT. 8<sup>th</sup>, 2008 – MONDAY**

8:00 am – 7:00 pm – Registration, Auditorium Maximum, Jagiellonian

University, Krupnicza St. 35

9:00 am - 1:00 pm - Plenary session

1:00 pm - 3:00 pm - Lunch

3:00 pm - 7:30 pm - Plenary session

8:00 pm – 10:00 pm – Artistic Presentation "Mining Traditions – the jump over a leather

apron" traditional miners' initiation rite", Krakow Main Square

#### DAY 3

#### SEPT. 9<sup>th</sup>, 2008 – TUESDAY

Visit to the Mining EXPO in the EXPO SILESIA Exhibition and Trade Fair Centre in Sosnowiec

10.00 am — Opening ceremony of the Mining EXPO with participation of the

**Congress attendees** 

2:00 pm — Departure to Belchatow and Lubin for those participating in the

outgoing sessions

6:00 pm – Return to Krakow

#### DAY 4

#### SEPT. 10th, 2008 -WEDNESDAY

Sessions in Krakow

Outgoing sessions in Katowice, Lubin, Belchatow and Wieliczka

Session via satellite link

#### DAY 5

#### SEPT. 11th, 2008 - THURSDAY

Plenary sessions and Congress closing ceremony Farewell concert

#### DAY 6

#### **SEPT. 12th, 2008 - FRIDAY**

10:00 am – 4:00 pm – Final day of the World Mining Expo in Sosnowiec – last opportunity to attend

### **Committees and Representatives**

At the World Mining Congress International Organising Committee Meeting in Teheran in November 2005 it was decided that Poland would be given the right to organise and hold the 21<sup>st</sup> World Mining Congress and EXPO in September 2008. Awarding the organisation of the Congress and EXPO to Poland is a great honour, and recognition of Polish mining research and technologies, but it is also a great organisational challenge.

Honorary patronage over the Congress has been assumed by the President of the Republic of Poland, Mr Lech KACZYŃSKI.

#### THE HONORARY COMMITTEE

The honorary scientific patronage over the 21st World Mining Congress has been assumed by the Rector of the Stanisław Staszic AGH University of Science and Technology, Prof. Antoni TAJDUŚ, who has also promised his assistance in the organisation of the Congress.

#### THE SCIENTIFIC COMMITTEE

The Scientific Committee of the 21<sup>st</sup> World Mining Congress will be chaired by:

□ Prof. Wacław TRUTWIN.

The committee members are:

- Prof. Zu Deren (China)
- Prof. W. Leopold (Austria)
- □ Prof. A. Janovsky Borisovich (Russia)
- □ Prof. Vi. A. Kharchenko (Russia)
- □ Ph.D. M.P. Narayana (India)
- □ Ph.D. D. Menzi (USA)
- Mr J. Gutierrez (Mexico)
- Prof. A.K. Ghose (India)
- □ Prof. R. Matikainen (Finland)
- □ Prof. Ch. Buhrow (Germany)
- □ Prof. P.N. Martens (Germany)
- □ Ph.D. E. J. Nezhad (Iran)
- Prof. K. Uchino (Japan)
- □ Prof. A. Marabini (Italy)
- □ Mr T. Benmlih (Morocco)
- □ Prof. J. Palarski (Poland)
- □ Ph.D. W. Korzeniowski (Poland)
- □ Prof. S. Bordia (Papua New Guinea)
- □ Prof. J. Durove (Slovakia)

AGH University of Science and Technology



### **Committees and Representatives**

- □ Prof. T. Cermak (Czech Rep.)
- □ Prof. G. Pivniak (Ukraine)
- □ Mr M. Ericsson (Sweden)
- □ Prof. S. Eskikaya (Turkey)
- □ Prof. B. Kalman (Hungary)
- Mr P. Vojuczki (Hungary)
- Ph.D. W.K. Rymon-Lipinski (Republic of South Africa)
- □ Ph.D. P. Hrzenjak (Croatia)
- □ Prof. R. Simic (Serbia)
- □ Prof. F. Zerdin (Slovakia)
- Prof. V. Bondarenko (Ukraine)



KRAKOW, PANORAMIC VIEW

#### THE ADVISORY COMMITTEE

The Advisory Committee of the 21st World Mining Congress will be chaired by Ph.D. Piotr BUCHWALD.

The responsibility of the Advisory Committee will be to give advice and to support the initiatives of the 21<sup>st</sup> World Mining Congress Organizing Committee and to help the Committee in completing any strategic tasks relating to the organisation of the Congress.

#### THE ORGANIZING COMMITTEE

Ph.D. Piotr BUCHWALD, Chairman of the World Mining Congress Organizing Committee has entrusted the task of organising the 21<sup>st</sup> World Mining Congress to **Mr Jerzy Kicki, Chairman of the Board of the Foundation for Stanisław Staszic AGH University of Science and Technology.** Along with Mr Kicki the members of the Organizing Committee are:

- □ Mr. Artur Dyczko
- Mr. Jacek Jarosz
- Ms. Agnieszka Stopkowicz
- Ms. Katarzyna Witek
- Mr. Eugeniusz J. Sobczyk
- Mr. Piotr Saługa
- Mr. Michał Kopacz
- Mr. Jacek Bielawa
- Mr. Jacek Skiba
- Mr. Krzysztof Stachurski
- Ms. Barbara Marchewczyk

#### **OVERSEAS MEMBERS OF THE ORGANIZING COMMITTEE**

- □ Mr. Alfonso Carvajal de Rojas, Universidad de La Serena, CHILE
- Mr. Roman Dyczkowski, Dniepropietrovsk National University, UKRAINE
- Mr. Anton Sroka, TU Bergakademie Freiberg, GERMANY
- Mr. Jacek Paraszczak, Université LAVAL, CANADA
- Mr. Tadeusz Bar, Universidad dl Tachira, VENEZUELA
- Mr. Tadeusz Szwedzicki, AUSTRALIA
- Mr. Yuan Shujie, Anhui University of Science & Technology. Huainan, Anhui, CHINA
- Mr. Vo Chi My, Hanoi University of Mining and Geology, VIETNAM
- Mr. Mladen Stjepanovic, Full member of Engineering Academy, SERBIA

# 2 | st World Mining CONGRESS EXPO 2008

### **Fees and Important Deadlines**



Papers submitted and accepted to the Congress will be printed in the Congress proceedings published by the Francis & Taylor Publishing House (A.A. Balkema) and in Polish professional magazines, e.g. "Archiwum Górnictwa" [Archives of Mining Sciences (AMS)] and "Gospodarka Surowcami Mineralnymi" [Mineral Deposits Management]. Detailed instructions for paper submission can be found on the official Congress web page at: www.wmc-expo2008.org.

#### IMPORTANT DATES THAT NEED TO BE CONSIDERED WHEN SUBMITTING PAPERS TO THE 21<sup>ST</sup> WORLD MINING CONGRESS:

1. The deadline for abstract submission: closed 2. Notification of abstract acceptance: closed

3. The deadline for notification of paper acceptance and for possible comments: 15th May 2008

4. The deadline for final paper submission and for the declaration of waiver of the author's rights, full registration and payment of the full congress fee: 31st May 2008

Only papers received by 31st May 2008, for which the authors completed the full registration, will be sent for publication. Papers shall be prepared in English and edited in accordance to the editing regulations specified on the official Congress

The official language of the Congress is English.

The plenary sessions will be translated simultaneously into Polish.

#### **CONGRESS FEES**

The Congress Fee includes:

- congress materials
- banquets and meals (lunch)
- outgoing sessions and entrance fee to the world mining exposition "Mining Expo 2008"

**PROMOTION** 

BY 31<sup>ST</sup> MAY 2008

- participation in concerts and other accompanying activities
- souvenir World Mining Congress 50<sup>th</sup> Anniversary Medal

#### Congress Fee:

- after 31<sup>st</sup> May 2008 € 650
- accompanying person € 250
- □ fee for Authors before 31st May 2008 € 500

#### **IMPORTANT DATES**

- □ The deadline for final paper submission and for submitting the declaration of waiver of the author's rights, for the full registration and for payment of the full congress fee: 31st May 2008.
- □ Final deadline for registration and payment: 1st August 2008\*

\*After this date persons without registration and full payment will be removed from the participants' list.

web page at: www.wmc-expo2008.org.

Defore 30<sup>th</sup> April 2008 – € 500



# Plenary Session - "Keynote Speakers"

As part of the plenary session of the 21<sup>st</sup> World Mining Congress the following authors confirmed their participation (with oral presentation):



#### **Magnus ERICSSON**

Chairman and co-founder of the Raw Materials Group (RMG). RMG is one of Europe's leading, independent groups of mineral economists and mineral strategy/policy analysts. RMG specialises in global analysis of the mining industry starting with our proprietary ownership and production database Raw Materials Data. Raw Materials Data covers both the global metals and coal industries in great detail.

The Raw Materials Group has for over two decades been advising governments, international organisations and the mining industry extensively. A particular focus has been placed on analysis of the global industry structure and the M & A deal flow, and the iron ore industry, developing government mining promotion strategies.

Mr Ericsson obtained his MSc in chemical engineering from the Royal Institute of Technology, Stockholm in 1973 and has almost 20 years of management experience from Scandinavian industry prior to joining the RMG. He is the Swedish representative of the WMC IOC.

Global commodity outlook and implications for the mining industry



#### **Niall WEATHERSTONE**

Niall Weatherstone is currently Chairman of the Committee for Mineral Reserves International Reporting Standards (CRIRSCO) and is based in the United Kingdom where he works for Rio Tinto as a project reviewer. Niall graduated from Edinburgh University in Scotland in 1974 and has pursued a career in the mining industry for over 34 years, working in Africa, UK, Ireland and Australia at mining operations producing copper, lead, zinc, silver, coal, iron ore and gold. His interest in mineral resource and mineral reserve reporting issues originated in the 1980s and he has since taken on a number of responsibilities with Rio Tinto in this regard, as well as promoting the issue of international reporting standards. He is currently a member of the Pan European Reporting Committee whom he also represents on CRIRSCO.

Standards for reporting of mineral resources and reserves – status, outlook and Important Issues

### 2 | st World Mining Congress & expo 2008

# Plenary Session - "Keynote Speakers"



#### **Ian GORDON**

lan Gordon is a leading financial historian and a top performing retail broker. He is author of the highly acclaimed Longwave Analyst newsletter and is a frequent guest speaker. Ian graduated from The Royal Military Academy, Sandhurst in the United Kingdom and, after emigrating to Canada, completed a History degree at the University of Manitoba. Ian is a student of Russian economist Nikolai Kondratieff and his theories of the Kondratieff Wave. After mastering Kondratieff's theories Ian realized that within the wave was a series of cycles that could predict the outcome of investments, mass mood, interest rates, inflation and deflation. It was these new findings that persuaded Ian to begin writing the Longwave newsletter in 1998. Based on Ian's conclusions he accurately predicted the end of the massive equity bull market

Based on lan's conclusions he accurately predicted the end of the massive equity bull market and also accurately predicted the beginnings of the current gold bull market (1999). Ian currently serves as a Vice President of Bolder Investment Partners in Vancouver where his team attends to the needs of their extensive client base and undertakes numerous quality junior precious metals financings.

Trends, risks in investment in mining



#### **Milton CATELIN**

Milton Catelin has since January 2005 been the Chief Executive of the World Coal Institute. Prior to that, he worked with the United Nations Environment Programme (UNEP) in Geneva, where, as Chief of Partnerships & Public Affairs, he created a public-private partnership programme for the Basel Convention on Hazardous Wastes. Milton Catelin has worked at executive level in the Australian Department of the Prime Minister & Cabinet, the Department of Finance & Administration, and the Department of the Environment & Heritage. He was a chief negotiator for Australia on both the Kyoto Protocol on Climate Change and the Montreal Protocol on Substances that Deplete the Ozone Layer and has a Masters in Public Policy. He has received Awards for his environmental work from Australia (2001: "significant and sustained contribution to the achievements of Environment Australia"); the USA (2003 EPA Stratospheric Protection Award); and the United Nations (2007 UNEP Montreal Protocol Outstanding Contributors Award).

The role of coal as an energy source



#### A K GHOSE

Former Director of the Indian School of Mines, Dhanbad, Prof. Ajoy K. Ghose is a distinguished academic and mining industry consultant who is currently the Editor of Journal of Mines, Metals & Fuels and a Director of Central Mine Planning & Design Institute, Ranchi besides working as a Performance Auditor and mentor of 12 engineering institutions supported by the World Bank TEQUIP project. He is a Fellow of the Indian National Academy of Engineering, a past President of The Institution of Engineers (India) and of the Mining, Geological and Metallurgical Institute of India. He has received several national and international honours, including the Krupinski Medal, the National Mineral Award and National Design Award, a Honorary Doctorate from the University of Petrosani and is a Foreign Member of the Academy of Mining Sciences, Russia and a Honorary Life Member of SITAG, Poland. The author of two books and editor of 22 publications, he has to his credit some 350 scientific papers.

Sustainable development in world mining industry in the light of the New Delhi Declaration – NDD

# Plenary Session - "Keynote Speakers"



#### **Christine COPLEY**

Christine Copley joined ICMM in June 2007 from our associate member, the World Coal Institute (WCI). She is responsible for ICMM's Environment and Health and Safety work programs. She spent the previous five years as senior manager at WCI, representing the industry at international energy and environment meetings and policy forums. She has authored and contributed to a number of reports on energy and coal, and organized several international workshops.

From 1998 to 2002, she worked as an Environmental Specialist on international development issues in the energy and urban environment sectors at the World Bank in Washington DC, providing input to research, lending and learning activities. Christine has degrees in Geology and Environmental Science, and started her career at the UK's Coal Research Establishment.

Sustainable development for sustainable industry growth



#### John E. TILTON

John E. Tilton divides his time between Chile, where he is holds the Chair in Mineral Economics in the Engineering School of Pontificia Universidad Católica de Chile, and the United States, where he is a Research Professor at the Colorado School of Mines. His teaching and research interests over the past 30 years have focused on economic and policy issues associated with the metal industries and markets. His recent research examines the role of mining in economic development, the environment and mining, material substitution, long-term trends in metal demand, the recycling of metals, the sources of productivity growth in mining, and changes in comparative advantage in the metal trade.

He has worked for a year as an Economic Affairs Officer for the Mineral and Metals Branch of the United Nations Conference on Trade and Development in Switzerland, and spent two years at the International Institute for Applied Systems Analysis in Austria directing a research program on mineral trade and markets. More recently, he has been a Senior Fulbright

Scholar at the Ecole Nationale Superieure des Mines in Paris; a Haydn Williams Fellow at the Curtin University of Technology in Perth; and a Visiting Professor at the Graduate School of Energy Sciences at Kyoto University. A University Fellow at Resources for the Future since 1989, Professor Tilton has served on various boards and committees of the National Research Council, including most recently the Panel on Integrated Environmental and Economic Accounting. In recognition of his contributions in the field of mineral economics, he has received the Mineral Economics Award from the Society for Mining Metallurgy and Exploration, the Distinguished Service Award from the Mineral Economics and Management Society, and an Honorary Doctorate from the Lulea University of Technology in Sweden.

Long run availability of non-renewable mineral resources



#### **Michael KARMIS**

Michael Karmis is the Stonie Barker Professor of the Department of Mining and Minerals Engineering and the Director of the Virginia Center for Coal and Energy Research, at Virginia Tech. His expertise is in the areas of mine design, ground control, health and safety, carbon sequestration and the sustainable development of energy and natural resources. He has authored more than 150 scientific papers, reports, Proceedings volumes and textbooks and has directed 40 major research projects. Dr. Karmis has been active in consulting with the minerals industry, consulting companies, government organizations and legal firms. He served as the 2002 President of the Society for Mining, Metallurgy and Exploration (SME) and

he is the President-elect (2008) of the American Institute of Mining, Metallurgical and Petroleum Engineers (AIME). He was elected as the 2002 President of the Society of Mining Professors (SOMP) - Societät der Bergbaukunde and since 2005 serves as the Secretary General of SOMP. He is a Distinguished Member of the SME, a Fellow of the Institute of Quarrying and a Fellow of the Institute of Materials, Minerals and Mining. He has received numerous recognitions and awards by major scientific, professional and industrial organizations.

#### **Scott KEIM**

President, Marshall Miller & Associates, Bluefield, Virginia.

The Future of Coal - a USA Perspective

### 2 | st World Mining Congress & expo 2008

# Plenary Session - "Keynote Speakers"



#### **Ray DURRHEIM**

Professor Ray Durrheim holds the South African Research Chair in Exploration, Earthquake and Mining Seismology at the University of the Witwatersrand and is a Fellow in the Natural Resources and the Environment Unit of the Council for Scientific and Industrial Research (CSIR). He has participated in many studies dealing with deep level mining and rock bursting. From 1998 to 2002 he was the manager of the DeepMine and FutureMine Collaborative Research Programmes. In 2005 he was commissioned by the Chief Inspector of Mines to lead an investigation into the risks to miners, mines and the public associated with large seismic events in the gold mining districts. He is currently the leader of the research project entitled "Minimising the Rockburst Risk", sponsored by the Mine Health & Safety Council. This project encompasses research on to-

pics such as seismic source mechanisms, the dynamics of fault zones, rock burst damage mechanisms, and seismic hazard assessment methods.

Rock engineering for ultra-deep mining – research, implementation and responsive regulation



#### Antoni TAJDUŚ, Professor

AGH University of Science and Technology Dept. of Mining and Geoengineering Geomechanics, Construction and Geotechnics Chair e-mail: tajdus@agh.edu.pl

Specializes in the field of underground and open-cast mining, geomechanics, geotechnics, and underground construction. He has authored more than 350 publications, monographs, and books. Over 250 industrial reports and research analyses have been conducted under his direction. He holds eight patents and is the director and executor of 15 research projects (grants). He has promoted 9 doctorates and has been the reviser of more than a dozen doctoral and associate professorship theses. At present he is president of the Rock Mass Mechanics Section of the Committee on Mining at the Polish Academy of Sciences. He is a member of the Committee on Mining at the Polish Academy of Sciences, the Committee and Section on Mining and the

Power Industry at the Polish Academy of Arts and Sciences, the Malopolska Committee on Geotechnics and the International Society for Rock Mechanics. He is also a member of the commission for rock bursts in bituminous cola mines, and the commission for rock bursts in KGHM Polska Miedź S.A. Between 1997 and 2001, he was a member of the expertise team for the restructurization of bituminous coal mining. Besides this he is also the member of the scientific committees of several international mining and geo-engineering journals. From 1996-2002 he was Dean of the Department of Mining and Geoengineering of the AGH University of Science and Technology. From 2002-2005 he served as Deputy Rector for General Matters of the AGH University. At present, Prof. Antoni Tajduś is rector of the AGH University of Science and Technology in Krakow.



#### Marek CAŁA

Is a lecturer at the Department of Geomechanics, Civil Engineering and Geotechnics in the Faculty of Mining and Geoengineering of the AGH University of Science and Technology. He is the author of over 55 papers published in journals and conference proceedings – both national and international – as well as the author of two monographs. Marek Cała is also the author and co-author of over 250 studies prepared for the mining industry. He is a member of The International Society for Rock Mechanics (ISRM) and The International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE).

Trends and perspective of the Polish mining industry

# Plenary Session - "Keynote Speakers"



#### **Maksymilian KLANK**

Maksymilian KLANK joined the coal industry in 1979 after graduating from the Academy of Economics in Katowice. He obtained a doctorate in technical sciences at the Academy of Mining and Metallurgy in Kraków. From May 2003 till May 2006, Dr. Klank was the President of the Managerial Board of Kompania Węglowa/Consolidated Coal Company - the single largest coal producer in Europe with an annual output in excess of 50 million tonnes. He is also President of the Board of the Association of Hard Coal Employers. Dr. Klank is a Member of the Mining Economics and Organisation Section of the Polish Academy of Sciences and also a Member of the Mining Committee of the Academy. He is the author of numerous publications issued both in Poland and abroad mainly on the economic and

financial aspects of the coal industry and on its restructuring.

#### Future of coal – from the European perspective

#### Wang XIANZHENG

Wang Xianzheng was born in Liaoning Province in August 1946. He graduated from Fuxin Mining Institute in 1969 and worked as Technician, Shaft Manager, Assistant Mine Manager and Mine Manager in Yunnan Province from 1969 to 1988. In May 1988, he was promoted to Deputy Director-General of the Yunnan Provincial Coal Industry Bureau. In August 1990, he was further promoted to Director General of the Yunnan Provincial Coal Industry Bureau. In April 1995, he came to Beijing to serve as Vice Minister of the Ministry of Coal Industry. From March 1998 to March 2000, he served as Deputy Administrator of the State Administration of Coal Industry. During March to August 2000, he served as Administrator of the State Administration of Coal Mine Safety. In August 2000, he was transferred to serve as Vice Governor of Shanxi Province. In May 2002, he became Administrator of the State Administration of Work Safety. From February 2005 to the present, he is First Vice Minister of the State Administration of Work Safety, and concurrently from January 2007, he is President of the China National Coal Association. Since March 2008, Wang Xianzheng is a Member of the Standing Committee of the 11<sup>th</sup> Chinese People's Political Consultative Conference (CPPCC). Wang Xianzheng is a professor-level senior engineer.



#### Development perspectives of China's mining industry



#### **Carsten DREBENSTEDT**

Carsten Drebenstedt studied at the Mining University of Moscow, where he first graduated as a certified engineer and also attained a PhD in 1990. Before being appointed as lecturer of mining/open-pit-mining at Freiberg University of Mining and Technology, he worked in management positions in the industry, including at Lausitzer Braunkohle AG. Since April 2000, he is vice chancellor of research at Freiberg University of Mining and Technology.

Environmental management – from mineral exploration to mine closure

#### Tadeusz SZWEDZICKI

Tadeusz Szwedzicki graduated from the University of Science and Technology (AGH), Krakow and obtained his PhD from the Central Mining Institute in Katowice, Poland. Tad's expertise is in the application of geomechanics to mining methods, mine design and ground support. He has worked in mining operations in seven countries in Australasia, Africa and Europe. His experience in various commodities has been gained working for the world's largest mining companies, such as PT Freeport (Indonesia), ZCCM (Zambia), AngloAmerican Corp (Republic of South Africa), and WMC and BHP Billiton (Australia). He also worked as Senior Lecturer at the Western Australian School of Mines in Kalgoorlie, Western Australia. His expertise has been recognized through a nomination by AusAid - Australian Aid Organization, to be Mineral Resource Adviser to the Government of Papua New Guinea. He is also the recipient of a Silver Medal awarded by the Institution of Mining and Metallurgy, London. He has published a number of papers in the International Journal of Rock Mechanics and in the Transactions of the Institute of Mining and Metallurgy.



Precursors to rock mass failure in underground mines

Outgoing Session
Central Mining Institute, Katowice

# COAL MINING – CHANCES AND CHALLENGES





L.W. BOGDANKA S.A. COAL MINE, LUBLIN

This session's programme includes the following topics: mining in a period of restructuring, new research methods and design solutions, modern mining techniques and technologies, and recent progress in mining.

The key challenges facing mining companies today include: lowering coal production costs, mining in accordance with environmental protection standards, maintaining a high level of safety and also ensuring that coal production volume is sufficient to guarantee the punctual realization of orders. Each of these tasks presents a number of research challenges, whose solutions and implementation will ensure the efficient functioning of the Polish coal mining industry, and will create adequate conditions for it to maintain its solid global position. The main aim of the session is to indicate possibilities for implementing innovative solutions in mining which will create a new opportunity for meeting the goals described above.

#### **SESSION ORGANIZER**

The Central Mining Institute (GIG) is a research and development unit, subject to the Ministry of the Economy and working not only to aid the mining industry but also enterprises from other sectors including small and large businesses, public administration and regional government institutions and offices and foreign partners. Currently, the main areas of the institute's activity are: mining, environmental engineering and quality control-related topics, as well as education and training.

At present GIG is one of Poland's most prized partners in areas such as: waste utilization, raw material recycling, power supply inspections and modernization of power supply systems for municipalities and businesses, streamlining of water supply and sewage systems, environmental monitoring, the Cleaner Production programme and ecodevelopment programmes for municipalities and regions.

L.W. BOGDANKA S.A. COAL MINE, LUBLIN





L.W. BOGDANKA S.A. COAL MINE, LUBLIN

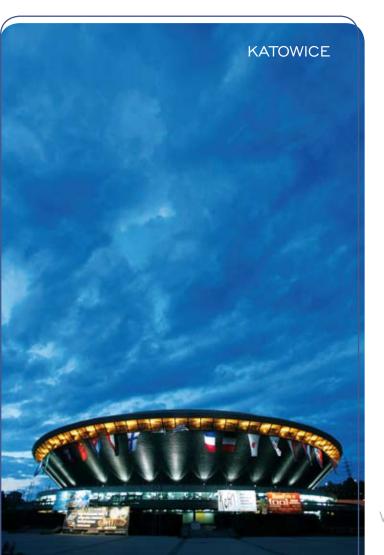
# Outgoing Session Central Mining Institute, Katowice

GIG offers a broad range of solutions in the area of work safety which include: market analysis, safety reports, work health and safety management systems, assessment and elimination of work environmental hazards, elimination of dust explosion hazards in industrial facilities and IT programmes that assist work health and safety management.

#### **SESSION ORGANIZING COMMITTEE**

Asst. Prof. Marian Turek, Ph.D. Eng. Andrzej Meder, Ph.D. Eng. Janusz Olszowski, M.Sc. Eng. Maksymilian Klank, Ph.D. Piotr Wojtas, M.Sc. Eng. Prof. Krystian Probierz, Ph.D. Eng. Stanisław Prusek, Ph.D. Eng. Małgorzata Malec, M.Sc. Eng. Anton Kurzeja, M.Sc. Eng. Lucyna Szołtysek, M.Sc.

- Central Mining Institute
- KOMAG Mining Mechanization Centre
- Mining Chamber of Commerce and Industry
- EURACOAL European Association for Coal and Lignite
- EMAG Centre for Electrical Engineering and Automation in Mining
- Dept. of Mining and Geology, Silesian University of Technology
- Central Mining Institute
- KOMAG Mining Mechanization Centre
- EMAG Centre for Electrical Engineering and Automation in Mining
- Central Mining Institute



#### SESSION COORDINATORS

Renata Patyńska, Ph.D. Eng. – Central Mining Institute Janusz Makówka, Ph.D. Eng. – Central Mining Institute

#### SESSION FRAMEWORK PROGRAMME

SEPT. 10th, 2008 - WEDNESDAY

8.30 – Departure from Krakow

10.00-10.15 - Session Opening 10.15-12.00 - Opening lectures

12.00-12.45 - Lunch

12.45-14.00 - Panel group discussion about the

principle global opportunities and challenges facing coal mining

Chairman

Vice-Chairman

- Vice-Chairman

14.00-18.00 - Tour of coal mine

18.00-19.30 - Traditional miners' feast 19.30 - Departure to Krakow

# Outgoing Session BOT Belchatów S.A., Belchatow



BOT BELCHATÓW S.A. LIGNITE MINE

# OPEN PIT MINING – TRENDS AND CHALLENGES



Lignite and rock raw material opencast mining occupies a significant position in the Polish economy both because of the country's increasing needs and demands of energy security as well as the rising needs of the road and construction industry.

The role of lignite coal is also on the rise, not just in Poland but also in the entire European Union, where it is mined in nine member countries. Poland has more than 150 known lignite coal deposits and lignite coal-bearing areas. More than 14 billion Mg in known deposits and more than 60 billion Mg in estimated deposits have been documented. The amount of deposits in potentially coal-bearing regions is estimated to be over 140 billion Mg. Exploitation of lignite coal is carried out by four mining companies: KWB Bełchatów, KWB Konin, KWB Turów and KWB Adamów.

About 360 million Mg of solid mineral deposits are obtained in Poland each year of which 60% are extracted by opencast mining.

Both lignite coal (about 60 million Mg/year) and practically all mineral raw materials (about 170 million Mg/year) including crushed and gravel aggregates, cement/lime raw materials, natural plaster, industrial sand, loam, peat and others are obtained in Poland's opencast mines.

Due to a large and documented geological base of these raw materials with good perspectives for the future and due to the application of appropriate and advanced mining technologies, the mining perspectives of these raw materials are mainly dependent on the increase in demand.

The main aim of the session organized jointly with BOT KWB Bełchatów S.A. is to indicate the possibilities of implementing innovative mining solutions which will create an opportunity for the lignite coal mining sector including technological development which will permit electrical or chemical-based processing of coal (mined or directly in the deposit) into gas and liquid fuel.

## Outgoing Session BOT Bełchatów S.A., Belchatow

#### **SESSION ORGANIZER**

BOT KWB Belchatów S.A. Company is the unquestioned leader among Poland's lignite coalmines. Deposit volume and output capacity place it among the largest European suppliers of this energy raw material.

BOT KWB Bełchatów S.A. has been operating uninterruptedly since January 17<sup>th</sup>, 1975. The extraction of the first ton of lignite occurred on November 19<sup>th</sup>, 1980. Since then, output has steadily increased until 1989 when the sought-after goal of 38,5 million Mg per year was achieved.

BOT KWB Belchatów S.A. is the largest opencast mine in Poland and one of the largest in Europe. The surface area of the internal heap and the mining heading of the Belchatow Field currently reaches 3,200 ha. The average yearly production of lignite in the Belchatow mine during the past couple of years has hovered around 35 million Mg, which is more than half of all the lignite mined in Poland. In order to achieve these results, every year more than 100 million m³ of surface cover are removed and about 170 million m³ of water pumped away. A total of over 700 million Mg of lignite has been obtained so far.

#### **SESSION ORGANIZING COMMITTEE**

Chair: Jacek Kaczorowski – BOT KWB Bełchatów S.A., Executive President

BOT BEŁCHATÓW S.A. LIGNITE MINE



BOT BEŁCHATÓW S.A. LIGNITE MINE

Outgoing Session BOT Bełchatów S.A., Belchatow



## THE FOLLOWING TOPICS WILL BE DISCUSSED DURING THE SESSION MEETINGS:

innovative solutions and applications for the use of lignite,

the newest achievements in conveyer belt transport solutions,

modern cutting head construction solutions, IT systems for lignite which service technology design, geology and mining surveying,

the effectiveness of lignite coal as an energy source compared to other sources of energy, the revitalization of mined terrain as en element of the development of regional eco-systems,

initial coal drying facilities in the technological process of electrical power production as a means of increasing power production efficiency,

the joint burning of renewable fuels and lignite in conventional power plants,

technical possibilities of increasing electrical power production efficiency in power plant technological systems growth perspectives for rock raw material mining,

modern technical and technological solutions contributing to an increase in the effective mining and use of rock raw mineral deposits,

legal aspects of waste management in rock raw material mining.

The session is directed toward those who are familiar with the topic of the development of lignite mining and electrical power production based on lignite, including representatives of lignite mining companies, power plants, the scientific community, mining offices, national and regional governments, engineers, constructors, representatives of companies from the mining and power industry sectors as well as from related sectors.

BOT BELCHATÓW S.A. LIGNITE MINE



### Outgoing Session KGHM Polska Miedź S.A., Lubin

# ORE MINING – TRENDS AND CHALLENGES



The deposit source based on one of the worlds largest single copper ore deposits, the increasing depth of the mining operations and undertaking works in increasingly difficult geological and mining conditions – this characterises modern copper ore mining in Poland and sums up the challenges faced by this branch of the economy.

Specific geological conditions of the deposit located in south-western Poland on the Fore-Sudety Monocline and the geo-mechanical parameters of the deposit rocks and the surrounding area are unique in the world. The basic factors determining the method of exploitation of the ore are high pressure within the rock formation and consequently the threat of rock crump as well as high primary temperatures in the rock, which causes a thermal hazard.

Currently used mining technology, based on a system of chambers and pillars, has been adapted

to the local layout of the ore deposits and to the scale of associated natural threats. The underground and aboveground infrastructure and technological process have been adapted to the mine's own needs and manufacturing requirements.

The ore mining and processing costs, resulting from the deep exploitation method and the necessity of building and maintaining the appropriate technological infrastructure have also increased as a result of the actions which have to be undertaken in order to protect the aboveground structures and those related to environmental protection.

The Polish copper ore mining industry plays an important role in the world copper market. In the last few years the production of electrolytic copper has held at a level exceeding 0.5 million Mg, which situates Poland among the largest copper producers in Europe and the world.

KGHM POLSKA MIEDŹ S.A.



### Outgoing Session KGHM Polska Miedź S.A., Lubin



#### **SESSION ORGANISER**

KGHM Polska Miedź S.A. is a company continuing the traditions of copper mining in the Lower Silesia region and the successor of the company formerly operating in the area – POLSKA MIEDŹ S.A. Copper mining in the Lower Silesia region goes back to 1950, when mining copper ore commenced in the "Lena" mine near Złotoryja. Draining the flooded mines and commencement of copper ore mining in the "Konrad" and "Lubichów" mines and building a new "Nowy Kościół" mine as well as the commencement of the metallurgical engineering process in Legnickie Zakłady Metalurgiczne marked the start of the development of the copper industry. Further development took place after the discovery of copper ore deposits located between Lubin and Sieroszowice in 1957.

Currently KGHM Polska Miedź S.A. is primarily one of the largest worldwide corporations producing refined copper and silver. The yearly production volume of KGHM locates the company at 6<sup>th</sup> place in the world. KGHM Polska Miedź S.A. is also one of the leading producers of silver – production volume around 1,200 Mg (second place in the world). In addition the company works towards developing technologies allowing for the extraction of other metals deposited in the ore, such as gold and rhenium. KGHM is the largest European copper producer having the company's own ore deposits at the company's disposal and owning an integrated manufacturing structure – from ore mining to the highest quality final product – all working for the benefit of the firm. The company is one of the largest Polish exporters. Production of the basic metals, that is copper and silver, is based on mining deep ore deposits in three mines: "Lubin", "Polkowice-Sieroszowice" and "Rudna". Ore is processed in the Ore Enrichment Plant (consisting of three ore enriching lines – one in each of the mines), in the "Legnica" and "Głogów I" and "Głogów II" metal works and in the copper rolling mill of HM "Cedynia" metallurgical complex. KGHM has its own sales and distribution departments. The sale is processed by its Trade Office supported by two other commercial companies: KGHM Polska Miedź S.A. seated in London and KGHM Kupferhandel GmbH seated in Vienna.

## Outgoing Session KGHM Polska Miedź S.A., Lubin

#### **SESSION TOPICS**

The topic of the session organised by KGHM Polska Miedź S.A. is an assessment of the current status of the ore mining industry in Poland and around the world, and the perspectives for the development of the industry in the future. The most up to date technical and technological solutions, allowing for increasing the effectiveness of mining and allowing for deep mining or opencast mining of ore deposits will be demonstrated. The session program also includes a field trip to one of the mines owned by KGHM Polska Miedź S.A.

# PROGRAMME OF THE SESSION DEDICATED TO THE TECHNIQUES AND TECHNOLOGIES OF COPPER ORE MINING ORGANIZED IN LUBIN BY KGHM POLSKA MIEDŹ S.A. COMPANY

#### DAY 1

SEPT. 9th, 2008 - TUESDAY

18.00

- Arrival at Legnica, accommodation in Hotel "Qubus"
- Night touring the city
- Supper

#### DAY 2

#### SEPT. 10th, 2008 - WEDNESDAY

8.00 am - 9.00 am - Registration 9.00 am - 12.00 pm - Conferences

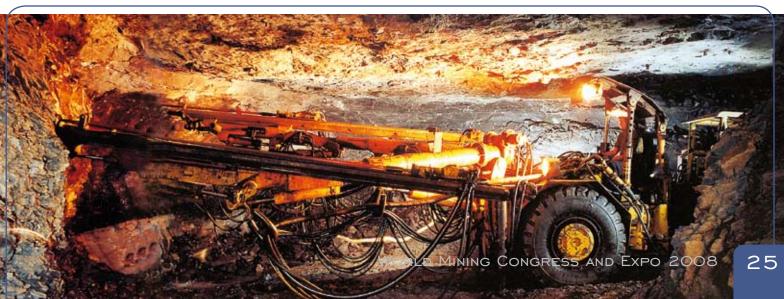
12.00 pm - 16.00 pm - Underground tour of the KGHM S.A. mines

- Rudna Mine
- Lubin Mine
- Polkowice-Sieroszowice Mine

16.00 – Transfer to KGHM Polska Miedź S.A. Administrative Headquarters for a festive miners' picnic

19.00 - Departure to Krakow

#### KGHM Polska Miedź S.A.



## **Outgoing Session** Wieliczka

## THE MINE **AS A WITNESS TO HISTORY AND A MONUMENT** OF TECHNOLOGY

The session "The Mine as a Witness to History and a Monument of Technology" is meant to be an interdisciplinary forum covering a wide range of issues which will provide an opportunity to familiarize oneself with and to discuss the current state and future prospects of underground historical monuments and other interesting technological monuments. We hope that it will become an interesting opportunity for an exchange of views and ideas, for many lively discussions and for making new contacts and consolidating old friendships.

The session's organizers would like to concentrate on the civilization-related aspects of the history of mining and on the relationship between engineering technology, man and the cultural environment he lives in. The aim of the session is to present the history of mining from an internal and an external point of view, to speak about the relationship between mining on the one hand and geography and the industrial structure on the other, and finally to also speak about the processes of change in the age of deindustrialization and about the role which is given to the

protection of tradition and of the world's mining heritage in

The issue of the restoration of technological monuments and old mines that have been or are being closed as well as change in their function is relatively new. It is highly important to consider how these old, closed mines and industrial plants together with their entire technological infrastructure can be used to create opportunities for economic growth through the expansion of tourism, recreation, balneology, and education.

All who are interested are invited to share their experiences in the field of protection of historical monuments and culture in traditional mining regions, both in the areas of basic research and the methodology of industrial archaeology as well as in the interpretation of material documents of cultural heritage and practical research connected to the insertion of cultural heritage into the rhythm of modern-day life and of the role they play in the social, economic and cultural activation of post-industrial regions.

WIELICZKA, THE SALT MINE





# Outgoing Session Wieliczka

WIELICZKA, THE SALT MINE

The session is oriented towards all those who are interested in mining traditions and the protection of the existing material heritage of the mining culture and will mainly focus on the following problems:

#### **SESSION ORGANIZERS**

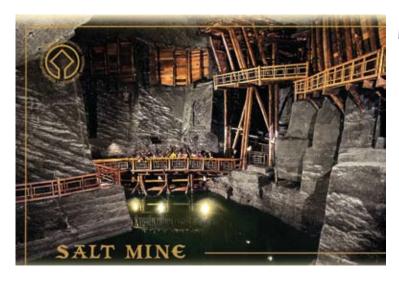
- MEERI Mineral and Energy Economy Research Insitute, Krakow
- AGH University of Science and Technology, Krakow
- □ The Silesian University of Technology, Gliwice
- □ The University of Wroclaw, Wroclaw
- Association for the Restoration and Promotion of the Queen Luisa Drift in Zabrze ProFuturo
- □ The Mining Portal www.teberia.pl, Krakow

#### **ORGANIZING COMMITTEE**

- Michał Kopacz
- Ludomir Wiśniewski
- Piotr Saługa

#### **LOCATION OF THE SESSIONS**

The proceedings of "The Mine as a Witness to History and a Monument of Technology" will take place in the historic underground passages of the Wieliczka Salt Mine.



#### **MAILING ADDRESS**

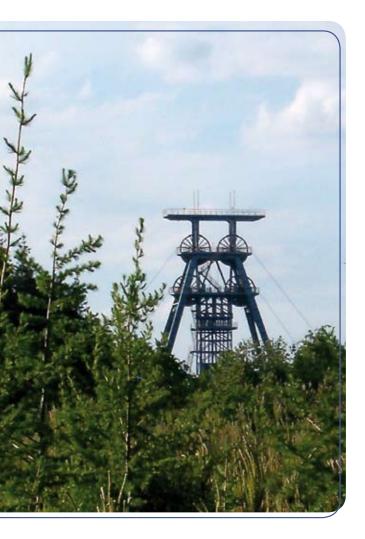
MEERI Instytut Gospodarki Surowcami Mineralnymi i Energią PAN ul. Wybickiego 7 30-950 KRAKOW 65, skr. poczt. 49, Poland

e-mail: mkopacz@min-pan.krakow.pl, psaluga@min-pan.krakow.pl ph. +48 (012) 632-45-43, +48 (012) 632-13-24; fax. +48 (012) 632-35-24

# Outgoing Session The State Mining Authority, Katowice



# LEGAL ASPECTS OF MINING ACTIVITIES



The session will focus on two detailed issues:

- □ the scope of geological and mining law;
- competencies of the mining supervisory authorities and the mining control authorities.

The aim of the session is, among others, the presentation of sources of law in the field of mineral extraction and the use of the subterranean deposits, discussion on the scope of regulation of mining legislation highlighting those activities that are covered by geological and mining laws in individual countries. There are significant differences in the approach of particular states to this problem. Some of them narrow the scope of the mining acts to the extraction of minerals and activities directly related to this issue only, whereas other countries broaden their provisions, encompassing a whole range of projects, including issues related to protection of the natural environment. The tasks of the organisations responsible for the supervision and control of the observance of the legal rules concerning mining activities in particular states will also be presented.

# Outgoing Session The State Mining Authority, Katowice

#### SESSION ORGANISER

The State Mining Authority, established in Katowice in 1922.

The basic role of the Mining Authorities, as defined in the Mining and Geological Act of 4<sup>th</sup> February 1994 is to provide supervision and control over the work of the mining plants with regard to:

- Occupational Health and Safety;
- Mine rescue operations;
- Managing mineral deposits;
- Natural environment protection;
- Establishing and closing of mines and mining plant.

The Mining Authorities cover mining plants extracting all types of mineral deposits as well as units conducting geological works, underground works with the use of mining technologies (e.g. tunnels) and companies working for the benefit of the mines. All those businesses are subject to regular inspections and controls conducted by employees of the Mining Authorities. The Mining Authorities supervise around 5,000 companies involved in mining activities. The President of the State Mining Authority is a central organ of the state administration and reports to the government minister proper for natural environment protection. In his work, the President is supported by vice-presidents and the general director. The President of the State Mining Authority is also the superior of the ten directors of the Regional Mining Authorities and of the Director of the Mining Authority responsible for the Control and Testing of Electromechanical Devices.



#### THE SESSION ORGANIZING COMMITTEE

- Piotr Gisman, M. Sc. Director of the Law Department of the State Mining Authority
- □ Magdalena Śmieszek, M. Sc. Senior specialist in the Law Department of the State Mining Authority
- Małgorzata Waksmańska, Ph. D. Chief specialist in the Law Department of the State Mining Authority

#### THE SESSION FRAMEWORK PROGRAM AND ITINERARY

#### 10<sup>th</sup> SEPTEMBER 2008 (WEDNESDAY)

TO SELLEMBER 2000 (WEDNESDAT)		
8:30 am	_	Departure from Krakow for Katowice
10:00 am - 10:20 am	_	Opening address by the President of the State Mining Authority
10:20 am - 12:00 pm	_	Plenary session
12:00 pm - 1:15 pm	_	Lunch
1:15 pm - 3:00 pm	_	Plenary session
3:00 pm - 3:30 pm	_	Discussion, session closing
3:30 pm - 5:00 pm	_	Visit to the historic mine
5:30 pm - 7:00 pm	_	Miners' Dinner
7:00 pm	_	Departure for Krakow

Satellite Session
17<sup>th</sup> International Conference
on Automation Mining
ICAMC 2008

# THE 17<sup>TH</sup> INTERNATIONAL CONFERENCE ON AUTOMATION IN MINING

#### **CONFERENCE VENUE**

The 17<sup>th</sup> International Conference on Automation in Mining ICAMC 2008 shall be held as a special session of the 21<sup>st</sup> World Mining Congress. It shall be hosted by the Faculty of Electrical Engineering, Automatics, Computer Science and Electronics at the AGH University of Science and Technology.

#### **FORMER CONFERENCES**

The former ICAMC conferences were held in:

1967 - Roznov, Czechoslovakia

1969 - Krakow, Poland

1971 – Balatonfüred, Hungary

1973 – Varna, Bulgaria

1977 - Ostrava, Czechoslovakia

1980 – Katowice, Poland

1984 - Budapest, Hungary

1986 – Cavtat, Yugoslavia

1988 – Zlatni Piasaci/Gold Sands, Bulgaria

1990 - Ostrava, Czechoslovakia

1992 – Ekaterinburg, Russia

1995 - Gliwice, Poland

1998 – High Tatras/Vysoke Tatry, Slovakia

2000 - Tampere, Finland

2003 - New Delhi, India

2005 - Teheran, Iran



L.W. BOGDANKA S.A. COAL MINE, LUBLIN

## Satellite Session 17th International Conference on Automation Mining **ICAMC 2008**

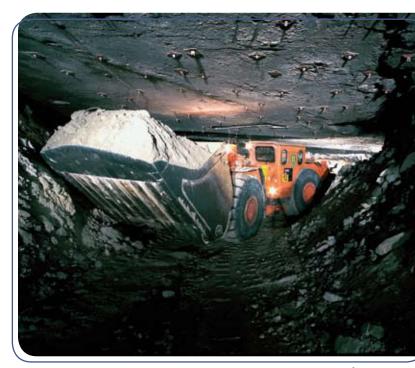
#### THE SUBJECT OF THE CONFERENCE

The most important issues to be discussed include:

- Basic theoretical and practical problems of automation in mining.
- Automation and diagnostics of machines and devices.
- Processing automation.
- Monitoring of production and safety parameters.
- Communications and alarm systems.
- Exploitation experience.

#### THE ORGANIZING COMMITTEE

- Prof. Tomasz Szmuc, AGH University of Science and Technology, Krakow, Poland
- Prof. Stanisław Cierpisz, Silesian University of Technology, Gliwice, Poland
- Prof. Vladimir Strakoš, College of Logistics, Prerov, the Czech Republic
- Prof. Eduard S. Lapin, The Urals State Academy of Mining and Geology, Ekaterinburg, Russia
- Prof. Dušan Malindžak, Technical University of Kosice, Slovakia
- Prof. Iwan Lalov, University of Mining and Geology, Sofia, Bulgaria
- Ph.D. Bolesław Firganek, ICAMC, Poland
- Ph.D. Kazimierz Mickiewicz, PCAMC, Poland



KGHM POLSKA MIEDŹ S.A.

KGHM Polska Miedź S.A.

#### **OFFICIAL LANGUAGE**

The Conference materials shall be provided in English.

The spoken languages shall include English, Polish and Russian.



Satellite Session
Economics, management and design in the mining industry

# ECONOMICS, MANAGEMENT AND DESIGN IN THE MINING INDUSTRY

Problems of economics, management and design in the mining industry, especially:

- mineral resources' management,
- management in the mining industry,
- economic problems of the mining industry,
- economic evaluation of mining projects,
- mine production process planning,
- modelling and optimization in engineering design,
- computer aided design,
- mine production scheduling,
- restructuring the mining industry.

#### THE ORGANIZING COMMITTEE

- □ Tadeusz Woźny, Ph.D. Eng.
- Jerzy Załucki, Ph.D. Eng.
- Marek Kęsek, Ph.D. Eng.
- Marta Sukiennik, M.Sc. Eng.
- □ Ewa Pękala, M.Sc. Eng.



THE SOBIESKI COAL MINE POŁUDNIOWY KONCERN WĘGLOWY S.A.

#### **CONTACT**

- □ Mr. Jerzy Załucki (48) 12 6174163, Polish language
- □ Ms. Marta Sukiennik (48) 126172072, English language
- □ Ms. Ewa Pękala (48) 126174612, Russian language, FRAMEWORK

#### **PROGRAMME**

9:30 am - 10:00 am - Welcome address
10:00 am - 11:30 am - Session opening
11:30 am - 12:00 pm - Tea/coffee break
12:00 pm - 1:30 pm - Proceedings
1:30 pm - 3:00 pm - Lunch
3:00 pm - 4:30 pm - Proceedings
4:30 pm - 6:00 pm - Session closure
7:00 pm - Social meeting

KGHM Polska Miedź S.A.



# Satellite Session Contribution of strata mechanics to mining technology and work safety

# INTERNATIONAL SYMPOSIUM ORGANIZED BY THE IBSM (INTERNATIONAL BUREAU OF STRATA MECHANICS)

# CONTRIBUTION OF STRATA MECHANICS TO MINING TECHNOLOGY AND WORK SAFETY

Session I – Strata dynamics (mine tremors, rock bursts, rock and gas outbursts) – hazard evaluation and accident prevention guidelines,

Session II - Mining operations within deep mineral deposits and close to tectonic disturbances,

Session III – New methods in geomechanical analysis (in situ measurements, new equipment, theoretical studies, numerical simulations).

#### THE ORGANIZING COMMITTEE

Cała Marek, Ph.D. Eng. – Chair, AGH University of Science and Technology, Krakow Kwaśniewski Marek, Ph.D. Eng. – Vice-Chair, Silesian University of Technology, Gliwice Asst. Prof. Bukowska Mirosława, Ph.D. Eng. – Secretary, Central Mining Institute, Katowice Nowakowski Andrzej, Ph.D. Eng. – Strata Mechanics Research Institute of the Polish Academy of Sciences, Krakow Prof. Walaszczyk Jan, Ph.D. Eng. – AGH University of Science and Technology, Krakow Prof. Majcherczyk Tadeusz, Ph.D. Eng. – AGH University of Science and Technology, Krakow Asst. Prof. Mutke Grzegorz, Ph.D. Eng. – Central Mining Institute, Katowice Rajkowska Magdalena, M.Sc. – Central Mining Institute, Katowice

#### THE SESSION CONSULTANTS

Prof. Antoni Tajduś, Ph.D. Eng. – AGH University of Science and Technology, Krakow

Prof. Józef Dubiński, Ph.D. Eng. – Central Mining Institute, Katowice KGHM Polska Miedź S.A.



Satellite Session
Risk Management
in Surface Protection



# RISK MANAGEMENT IN SURFACE PROTECTION

The liquidation of many coal mines in Europe; the catastrophes and sink holes in the land surface above numerous old mine heads in China, Germany, Austria, Spain, Poland and in other countries; and the problems of rock mass stability in deep mines, all make it more and more important to forecast and monitor land surface movements in mining regions. The costs of repair of buildings and construction infrastructure in areas subject to the effects of mining exploitation are growing. Therefore it is now regarded as one of the paramount problems of the mining industry to minimize the hazards to the land surface caused by the effects of existing and planned mining exploitation.

The Risk Management in Surface Protection session is organized as a satellite session within the 21st World Mining Congress.

During the session, new methods of risk assessment for buildings and infrastructure in mining areas will be presented and discussed. The objective of the session is to exchange ideas and solutions that may foster a more effective protection for buildings and other structures against the effects of mining exploitation. Many new geodetic measurement methods have been developed lately to monitor rock mass and land surface deformations. These methods help continuously and reliably monitor surface movements. The accuracy of the methods and the analysis of deformation measurements will be discussed in order to stress the role of mining geodesy in the modern mining industry.



The aforementioned issues are at the core of the activities of the Commission 4 of the International Society for Mine Surveying. The session is therefore an excellent opportunity to exchange opinions and experience in terms of forecasting and monitoring rock mass and land surface deformations and to discuss methods of risk assessment in mining areas. All mining engineers, construction engineers, scientists and other professionals in the related fields are kindly invited to this international event.

Prof. Ryszard Hejmanowski Chair of ISM Commission 4 AGH University of Science and Technology, Poland Prof. Anton Sroka TU Bergakademie Freiberg, Germany

# **Satellite Session**Risk Management in Surface Protection

#### **SESSION MAIN TOPICS**

- 1. Planning exploitation with a view to minimizing the effects of mining on land surface.
- 2. Present and future methods for monitoring deformations in mining areas.
- 3. Analyses of land movements and deformations.
- 4. Reliability of land surface deformation forecasts.
- 5. Defining the hazards and risk of damage to buildings in mining areas.

#### THE ORGANIZING COMMITTEE

Prof. Ryszard Hejmanowski – Chairman Prof. Anton Sroka – Vice-Chairman Zygmunt Niedojadło Diana Hößelbarth Agnieszka Malinowska

#### THE SESSION FRAMEWORK PROGRAMME

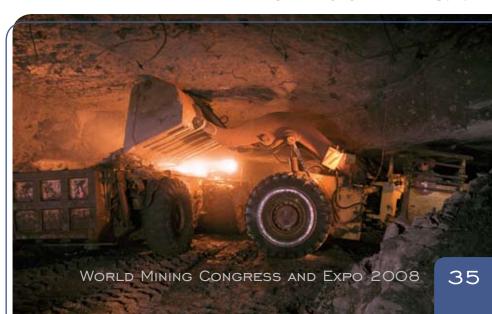
#### DATE

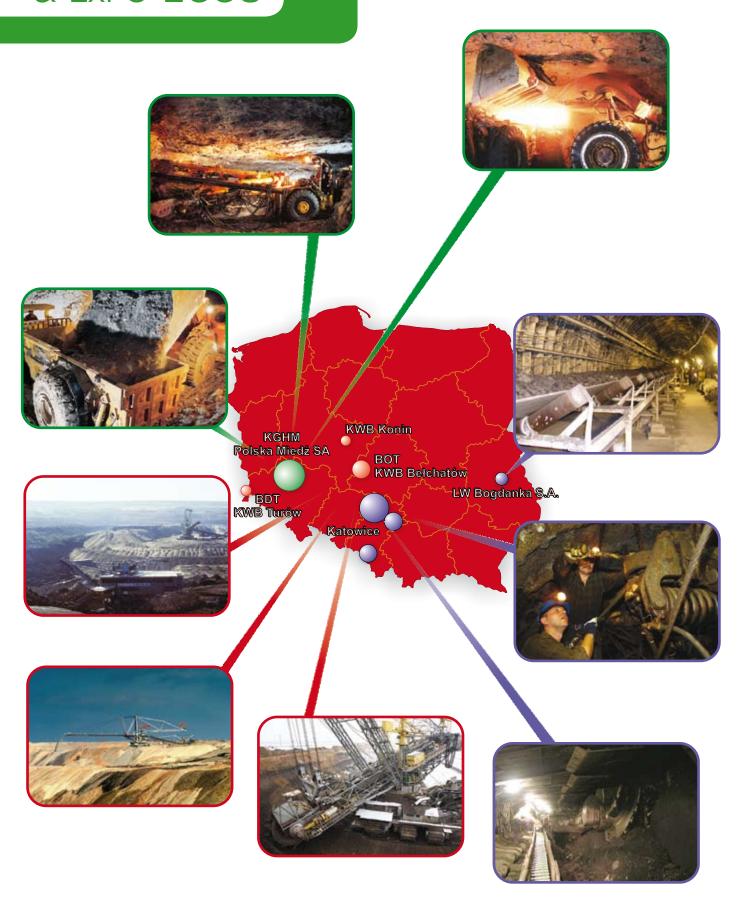
Wednesday, 10th September 2008

#### **VENUE**

AGH C-4 building, 1st floor, rooms: 102, 106

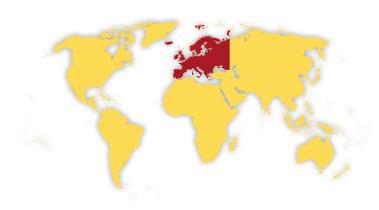
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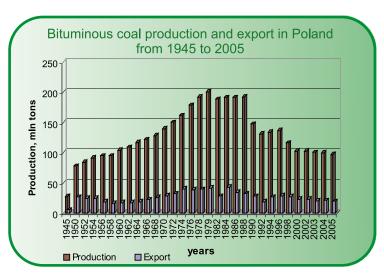


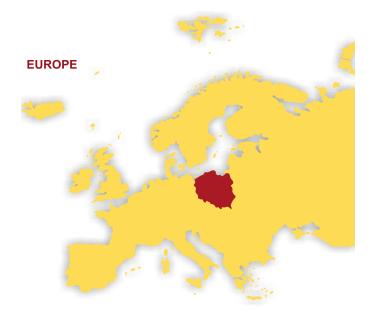


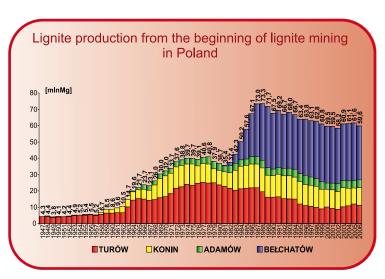
# Polish mining figures

#### **WORLD**

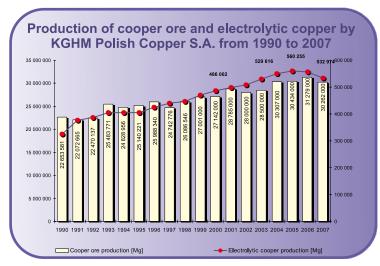












### The MINING EXPO

Expo Silesia, Sosnowiec 9-12<sup>th</sup> September 2008





#### **THE MINING EXPO 2008**

The exhibition of mining equipment and machinery will form an integral part of the 21st World Mining Congress. The EXPO run in conjunction with the congress is undoubtedly a top class international event:

- this is a unique opportunity for companies and manufacturers to showcase their latest achievements and equipment technologies to a wide audience, especially to those officials and specialists from all over the world responsible for future developments and key decisions in the mining sectors of their countries,
- o for the first time in many years MINING EXPO will be held in Europe,
- as before, major worldwide producers of mining equipment and machinery will take part in the exhibition more than 400 firms from 25 countries were represented at the two previous expos,
- the event will feature specially organised national pavilions for China, India, Turkey and a separate African Pavilion grouping together the continent's countries,
- the exhibition will host organised groups of visitors, in particular parties of specialists from Eastern European countries,
- the exhibition will take place in the newly established EXPO SILESIA exhibition centre, situated at the heart of the Silesian conurbation and the Polish mining industry.

#### SCOPE AND CONTENT OF THE EXPO EXHIBITION

In line with the congress motto "New Challenges and Visions for Mining", the Mining Expo will present the opportunity to view the latest equipment technologies and techniques employed in the mining industries. The exhibition will be themed around the following sectors of the industry:

- mining and processing of bituminous coal and lignite,
- machines and equipment for ore extraction and processing,
- drilling machines and drill fittings,
- rock mining,
- chemicals for the mining industry,
- electric power technologies,
- products from the iron & steel sector for the mining industry,
- environmental protection,
- occupational health and safety.



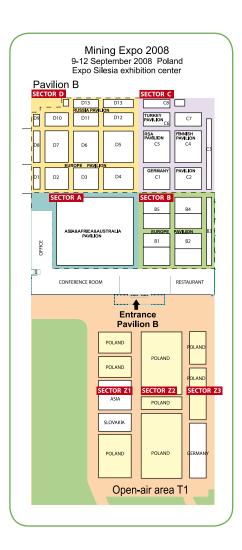
# MINING EXPO 2008 Expo Silesia, Sosnowiec 9-12<sup>th</sup> September 2008

#### **EXHIBITION VENUE**

The MINING EXPO 2008 exhibition of mining equipment and machinery will be held at the Expo Silesia exhibition centre in the town of Sosnowiec, which is situated within the extensive Silesian conurbation.

Key advantages of the facilities, accessibility and location:

- less than an hour's drive from the centre of the city of Krakow where the Congress is scheduled,
- two conveniently placed international airports Katowice--Pyrzowice (20 minutes' drive) and Krakow-Balice (40 minutes' drive),
- 13.5 thousand sq metres of indoor exhibition hall space alongside over 20 thousand sq metres of outdoor exhibition space – offering full trade fairs and exhibition infrastructure with access to all main services and utilities.







### **MINING EXPO 2008**

Expo Silesia, Sosnowiec 9-12<sup>th</sup> September 2008

#### THE MEDIA AND PROMOTION

The exhibition is promoted and advertised in the foreign media by way of such influential magazines as Coal International, Gluckauf, World Coal, International Mining, Russian Mining, Mineralni Suroviny, Gornaya Promyshlennost, Ugol, Tiajoloye Mashinostroenye, Nedropolzovanye, Gornyi Zhurnal, Mining & Quarry World, Bergbau and Steinbruch und Sandgrube as well as through the russiancoal.com portal and theminingweekly.co.za. In Poland the promotional campaign is being undertaken by such publications as Industrial Transport, Drives and Control, Pneumatics and Gigawatt. The weekly Mining Tribune and monthly magazines New Industry and The Mining News have begun working closely with the organisers on highlighting and promoting the event.

The EXPO congress and exhibition is also being publicised by the Organisational Committee during trips abroad. News and information of this year's event in Poland was given out widely at conferences, congresses and exhibitions held in Turkey, Chile, Mexico, Russia, Kazakhstan and Ukraine.

#### INTEREST OF WORLDWIDE COMPANIES

Half a year before the scheduled opening of the MINING EXPO 2008 there is considerable interest of exhibitors in the exhibition. Leading world brands will be represented by companies such as: SANDVIK Mining and Construction, JOY Mining Machinery, METSO MINERALS or the BOSCH REXROTH Group. Taking part within the national pavilions are companies from Australia, China, India, Indonesia, South Africa, Turkey and Finland. In addition, companies from Germany, the Czech Republic, Slovakia, Russia, Ireland, Denmark, France and Holland have acknowledged their individual participation in the exhibition.

## LARGE EXHIBITION AREAS HAVE ALREADY BEEN BOOKED BY THE MAJOR POLISH COMPANIES

The KOPEX group of companies (Mining contactors – pit-shaft construction etc, Kopex Famago, Dozut Tagor, Tagor, Tiefenbach, ZEG), the FAMUR group including member companies (Nowomag, Pioma, Fazos, Georyt, Dams, Śrem Foundry and IRR), ŁABĘDY Steel Works Stalowa Wola Iron and Steel Works, and Elektrometal Ltd. The GLINIK Group and the Lower Silesia Machine Manufacturing Company ZANAM LEGMET are also very much interested in putting on a substantial and effective presentation. Other businesses are also registering their participation in the exhibition whose products and services are primarily targeted at the mining sector.



# THE ORGANISER & CONTACT PERSONS

The organiser of the MINING EXPO accompanying the 21<sup>st</sup> World Mining Congress 2008 is Kolporter Expo Company. It is managed by a team of dedicated professionals experienced in delivering successful international trade fair events, which includes the sectors of the mining industry.

### **CONTACT – MINING EXPO EXHIBITION OFFICE IN POLAND:**

- Ms. Anna Opitek +48 32 78 87 510
   e-mail: anna.opitek@kolporter.com.pl
- □ Mr. Robert Torka + 48 32 78 87 512 e-mail: robert.torka@kolporter.com.pl
- Ms. Malgorzata Sosna + 48 32 78 87 511
   e-mail: malgorzata.sosna@kolporter.com.pl

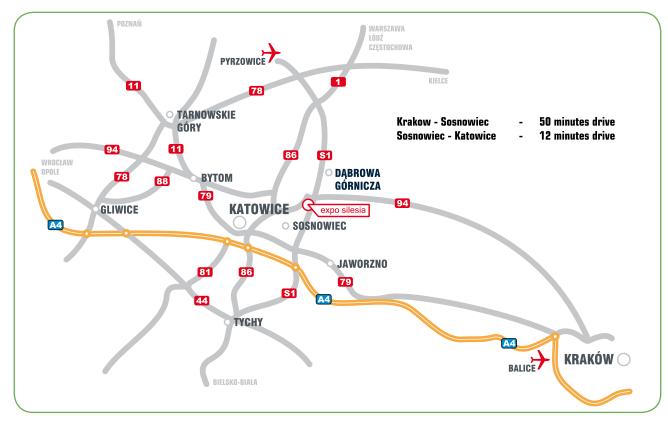
# MINING EXPO 2008 Expo Silesia, Sosnowiec 9-12<sup>th</sup> September 2008



#### INTERNATIONAL REPRESENTATIVES OF MINING EXPO

Promotion of the Congress and the EXPO exhibition also takes place abroad. MINING EXPO 2008 has representatives on the markets of: Russia, Ukraine, Turkey, South Africa, and Great Britain, as well as on the extensive continental markets of Asia i.e. India, China Taiwan, Malaysia, and Africa.

For more information about the MINING EXPO 2008 please visit: www.miningexpo.pl web site



# 2 | ST WORLD MINING Congress & expo 2008

### **Concerts and Events** accompanying the Congress

#### GALA PERFORMANCE OF THE "ŚLĄSK" **SONG AND DANCE ENSEMBLE**

The "Śląsk" Song and Dance Ensemble was founded in 1953 by professor Stanisław Hadyna who also became its artistic director. He was the son of a Silesian music teacher who was also a well-known folk-song collector.

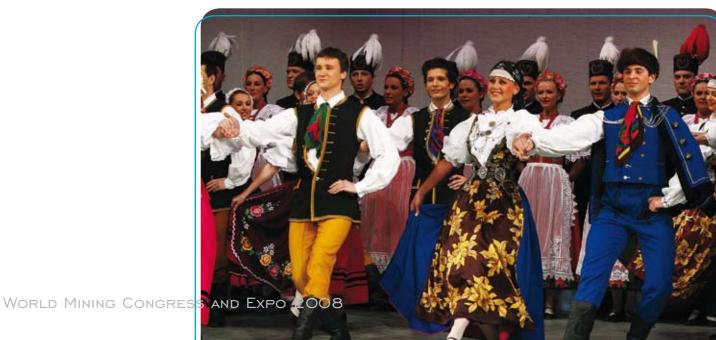
The high artistic standard maintained by the Ensemble has brought it world recognition and numerous awards and honours. Among them are the Silesian Music and Art Award, the Diploma of Recognition from the President of the United States of America and the Diploma of Recognition from the USSR Ministry of Culture. Countries where "Śląsk" has performed include Algeria, Australia, Belgium, Bulgaria, China, Denmark, Egypt, Finland, France, Greece, Spain, Holland, Hong Kong, Israel, Yugoslavia, Canada, Korea, Mongolia, Mexico, Norway, Romania, Tunisia, the USA, Hungary, Great Britain, Italy and the Soviet Union.

The artists will offer a performance consisting of their repertoire's most well-known and popular acts. The attendees will enjoy the Ensemble's hits such as "Karolinka", "Starzyk", "Helokanie", "Szła Dziewczyna", "Głęboka Studzienka" and other songs and ballads. Vocal performances will also include songs from other countries as interpreted by Stanisław Hadyna. These will include "Athina", "Berliner luft", "Green Sleeves", "Tańcuj Tańcuj" as well Smetana's, Verdi's and di Capua's choral showpieces.

The "Slask" Ensemble's Ballet Group will perform spectacular dances: Polish Highlander Dance, Cracovienne, Scarf Dance, Polonaise, Mazur, Kujawiak, Oberka and Polka, and all this is just a small part of the two-hour-long concert. The program will mostly include musical versions by the Ensemble's founder Prof. Stanisław Hadyn and choreography by Elwira Kamińska.

The "Ślask" Song and Dance Ensemble's performance is meant by the Congress organizers to be a colourful presentation of Polish national and folk culture and of the great cultural diversity of other nations.

"ŚLASK" SONG AND DANCE ENSEMBLE



# **Concerts and Events accompanying the Congress**

# ARTISTIC SPECTACLE: "MINING TRADITIONS – THE JUMP OVER A LEATHER APRON (TRADITIONAL MINER RITE OF INITIATION)", KRAKOW

The highlight of the celebrations accompanying the XXI World Mining Congress will be the open-air "Mining Traditions – the Jump over a Leather Apron" artistic spectacle, which will take place on September 8<sup>th</sup> at 7:00 pm on Krakow's old market square.

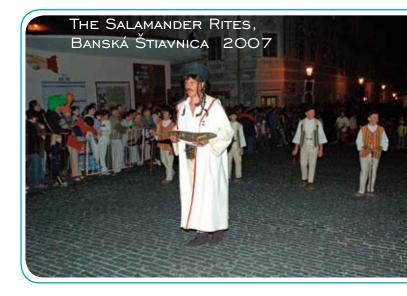
The event's programme includes an evening torch-lit parade of the Congress participants and invited guests clad in festive miner dress from the Jagiellonian University's Auditorium Maximum Conference Centre to the City Hall on Krakow's Main Square. Afterwards, the attendees will witness an artistic presentation of the beauty of Polish and European mining traditions.

The presence of invited guests from neighbouring countries will bear testimony to the European character of the traditions presented. Today, thanks to the Mayor of Banská Štiavnica Pavel Balzanka, we have already confirmed the presence of a group that will perform the SALAMANDER rites. This is how the Slovakian celebrations of Miner's Day are called.

Why a Salamander? According to legend, a long long time ago one of the farmers in Banská Štiavnica noticed a salamander on the slope of one of the hills surrounding the city. The salamander was covered in a coat of silver-gold dust. After a moment the salamander disappeared into a rocky crevice. The farmer followed the salamander's track and came to a cave in which he discovered a gold-bearing vein in the rock. This moment is considered to be the beginning of mining in Banská Štiavnica and of the golden age of Slovakian ore mining. It is worth mentioning that in the 16<sup>th</sup> and 17<sup>th</sup> centuries the Banská Štiavnica region was among Europe's leaders in terms of mineral ore mining.

The parade's participants will be accompanied by over a dozen orchestras. These will have taken part, a few hours earlier (at 3:00 pm) on Krakow's Main Square, in a display of orchestras organized on account of the Congress.

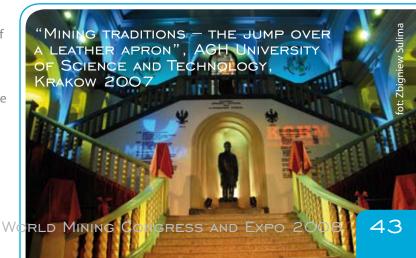
The main programme of the "Mining Traditions – the Jump over a Leather Apron" spectacle will focus on the traditions and customs of old mining groups. The spectacle will contain numerous accents to underscore the unity and strong human ties that were made manifest in the traditional Miner's Day celebrations. In these celebrations the miners would democratically decide about admitting new apprentices to the mining art, would gather together



for prayer and would celebrate the happy conclusion of another year.

A significant part of the customs and miners' rites which will be presented during the spectacle, and especially the miner initiation rite, were brought to Poland from Freiberg and Leoben by Polish students and later professors. They were the precursors of the Krakow Mining Academy (today the AGH University of Science and Technology), which was founded in 1919.

The organizers hope that the "Mining Traditions – the Jump over a Leather Apron" spectacle will relate to the beautiful traditions that were organized only in Krakow up until the 1970's. The Miner's Day parade is based on the



# **Concerts and Events accompanying the Congress**

historical mine and ironworks parade in Freiberg. However, the Krakow tradition had a specific university flavour.

The participants were mostly students and professors of the Academy as well as delegations which had arrived to take part in the celebrations. Various "classes of miners" seen in the Freiberg parade were replaced here by the different professions which existed in Polish mining. There were hosts of mineshaft miners with the typical waterproof suits. There were teams of miners working in the coal headings, and there were rescue workers and representatives of other professions.

The march of "foxes" in Krakow was led by the Miner's Foreman riding a white horse, whose role would often be taken by Prof. Witold Żabicki, an untiring proponent of this tradition. He was followed by a large horse-drawn platform decorated with pine trees on which the "Big Fox" stood on a beer barrel accompanied by an



"Mining traditions – the jump over a leather apron", AGH University of Science and Technology, Krakow 2007

"Mining traditions — the jump over a leather apron", AGH University of Science and Technology, Krakow 2007



entourage of "young foxes". There was a sizable group of students clad in festive uniforms with carbide lamps or lit torches in their hands followed by an ordinarily dressed horde of students mainly from the Department of Mining. Another uniquely Cracovian element was the horse-drawn carriages carrying the gallantly dressed Senate of the Academy. The inhabitants of Krakow who were observing this parade impatiently waited for the most important and most eminent carriage, the one carrying the Rector and the Prorectors.

It is our fondest hope that this spectacle prepared on occasion of the 21st World Mining Congress will in its excitement and mystery live up to the tradition of the original event, that it will become an unforgettable attraction for all of the Congress attendees, and that the route leading from the Jagiellonian University's Auditorium Maximum to the Main Square will be spontaneously filled by Krakow's inhabitants desiring to gladden their senses with the sight of festive miner's uniforms, carriages, rector's ermines and with the pleasant sounds of miner orchestra music.



# Concerts and Events accompanying the Congress

# THE EVENTS ACCOMPANYING THE CONGRESS:

- Polish mining in photography photo exhibition, outdoor exhibition – Krakow's Planty gardens
- An exhibition by various artists Polish painters associated with mining (from Teofil Ociepka to Erwin Sówka) – Auditorium Maximum Exhibition Hall
- The International Philatelist Exhibition

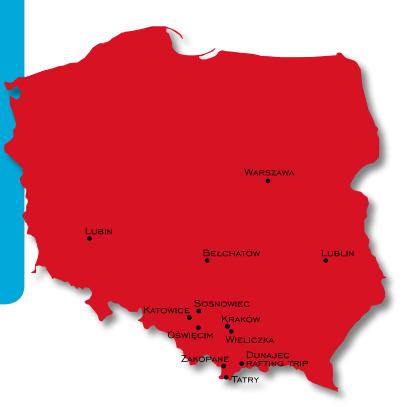
   exhibition of stamps and postcards with
   the mining theme Auditorium Maximum
   Exhibition Hall
- □ An outdoor event The Main Square of Krakow
- Ceremony of presentation of the occasional 50<sup>th</sup> anniversary of the World Mining Congress medal to those who particularly contributed in the organising of the World Mining Congresses

#### PUBLICATIONS ACCOMPANYING THE CONGRESS:

- Mieczysław Najberg "The history of World Mining Congresses"
- □ "The Polish Copper world of minerals" an album style publication
- Stanislaw Knothe and Anton Sroka A book promoting Polish mining industry



Congress and Post – Congress Tours



The Congress Office of Orbis Travel Tour Operator, working closely with the Congress Organizing Committee has prepared an array of local and post-congress tours for the Congress participants. The cost of those tours is not included in the Congress Fee. Those interested in the Congress and Post-Congress tours are invited to visit our web page, where you can find details of the trips on offer. The following tours are among the excursions offered in association with the Congress:

- Warsaw (arrival in Warsaw on the 5<sup>th</sup> or 6<sup>th</sup> of September 2008, exploring the capital city, arrival in Krakow for the Congress opening on the 7<sup>th</sup> of September)
- Exploring Krakow
- □ Krakow Jewish Quarter Kazimierz
- Wieliczka historic salt mines
- □ The Auschwitz-Birkenau Museum in Oświęcim
- Rafting on the Dunajec river gorge
- Zakopane







**WARSAW** 



KRAKOW JEWISH QUARTER



ZAKOPANE

# Congress and Post – Congress Tours

Persons interested in the history of the mining industry and the olden days mining techniques are invited to join the technical Post-Congress tours organised by the Congress Office of Orbis Travel Tour Operator. The price of the tours includes travel, accommodation and hotel breakfast.

- Krakow Wrocław Dresden
- Krakow Banska Štiavnica Kosice Miskolc Budapest
- Krakow Ostrava Kutna Hora Prague

# KRAKOW – WROCLAW – DRESDEN: 12-16<sup>TH</sup> SEPTEMBER 2008

The trip will begin with a transfer from Krakow to Wroclaw – the capital of the Lower Silesia region. Wroclaw, due to its unique character is often called the Venice of the North.

The history of Wroclaw goes back to middle ages. The city was already known in ancient times, being one of the stops on the Amber Tract. Today Wroclaw is proud of its second largest city square in Poland, numerous historic monuments and sites, great bridges and wonderful parks.

The next stop is Dresden – the former residence of the Saxon kings, also known as "Florence on the Elbe". The tour includes a visit to the picturesque, baroque old town, the Zwinger palace, the Sempera Opera House at the Theatre Square, the Catholic Court Church and the Frauenkirche Church. Later we will drive towards the famous Volkswagen Glass Factory and visit the magnificent leafy green city suburbs. The next stop is the cradle of the Saxon region – Meissen – a city situated in the vicinity of Dresden and famous for its porcelain manufactures. The main feature of the city is the beautifully renovated old town – a place where time stopped centuries ago.

The fourth day will be devoted to visiting the "Silver Trail" – the first tourist trail stretching along 230 km. The trail begins in Zwickau, the city where the former East German car manufacturing factory producing the Trabant car was located, and ends in Dresden – the city where in olden days the coffers overflowed with silver, which gave the region's rulers the means to retain power. Silver mining assured the wealth of the region and supported its cultural development. On the way we shall visit an open air ethnographic museum, Marienberg – the pearl of the Renaissance period, a mine open to visitors, Eiben-stock – a city of mines and embroidery and the "Mining and mineral deposits" educational route.







KUTNA HORA DRESDEN

# Congress and Post – Congress Tours



**KRAKOW** 

### KRAKOW – BANSKA STIAVNICA – KOSICE – MISKOLC – BUDAPEST 12-16<sup>TH</sup> SEPTEMBER 2008

A picturesque route along the most beautiful mountain roads of Poland and Slovakia. The first step goes through Chochołów and the Slovakian Orava Region, where the main attraction will be the visit to the Orava Castle (Oravski Podzamok) – a 13<sup>th</sup> century castle perched on the top of a 112 m high rock outcrop. Close to Banska Štiavnica we will visit the city of Kremnica, where gold and silver were mined since the middle ages up to 1970. The precious metals were than made into coins at the local mint. The historic relicts of Banska Štiavnica were listed on the UNESCO World List of Natural and Cultural Heritage in 1933. The Slovakian Mining Museum and the open air ethnographic museum in Banska Štiavnica offer a chance to familiarise oneself with typical mining buildings and structures, e.g. drilling towers brought to the ethnographic museum from the former mines operating in the region. The main attractions of the museum are the underground exhibitions of the "Bartlomiej" and "Glanzenberg" side drifts, demonstrating the history of precious metals' mining and the development of mining techniques in Bańska Štiavnica from the middle ages until the end of the 20th century.

The next stop is Miskolc – a very interesting Hungarian city with a wonderfully restored old city district. The main monuments include the Benedictine Abbey from 1143, the St. Michael's Chapel, St. Elisabeth's Chapel, the historic city walls from 1270, the 14<sup>th</sup> century free-standing cathedral bell tower and the magnificent synagogue from 1926. The tour ends in Budapest. The city tour will include a cruise on the Danube River.



BANSKA ŠTIAVNICA



# Congress and Post – Congress Tours

#### KRAKOW – OSTRAVA – KUTNA HORA – PRAGUE 12-16<sup>TH</sup> SEPTEMBER 2008

The trip will begin with a transfer from Krakow to Ostrava - a Czech town located in the Ostrava Valley, at the outlets of the Opava and Otravica Rivers to the Odra River – the former industrial region of the country. The industrial development of the Ostrava Region was triggered by the discovery of great hard coal deposits, which were extensively exploited from the 18th century. The last transport of coal was removed from Ostrava in 1994, but the memory of the mining history of the town is still present in the form of many testimonials to the mining tradition found in the city and its environs. The program includes, among others, a visit to the mining museum, established in 1994 at the site of the former "Eduard Urx" mine and located at the bottom of the Landek hill. The "Hlubina" mine, together with its coking plant and tall iron blast furnaces of the Vitkovice metal works is a world's unique site. The mine was established in 1843 and the furnaces were built in 1836. The objects formed a complete technological chain from coal mining to iron manufacturing.

Next stop is Kutna Hora – a place entered on the UNESCO World List of Natural and Cultural Heritage in 1996 – generally perceived to be the most interesting and most precious town in the vicinity of Prague. Nowadays Kutna Hora is a small town, only a shadow of its former medieval glory. For nearly 200 years Kutna Hora was the second largest city in Czech and in the 14<sup>th</sup> century the city was as populous as London at that time. From Kutna Hora we shall proceed to the town of Pribram, formerly an important mining centre. Currently all the town's mines are closed, but some have been preserved as monuments of technology. Underground one can admire historic steam powered devices and one of the most valuable exhibits: a great water wheel with a diameter of 12,4 metres. The Pribram Mining Museum is one of the greatest and most interesting in Europe.

The final stage of the trip is a visit to Prague – one of the most popular European capital cities, full of roman, gothic, renaissance and baroque buildings and some unique examples of art nouveau, cubist and functional architecture. The tour program includes a visit to Hradczany, the Prague Castle, the St. Vit's Cathedral, the Royal Castle and the Golden Alley – a street where medieval alchemists and goldsmiths had their workshops. The trip will end with a cruise on the Veltava River.



PRAGA



KUTNA HORA



PRAGA, KAROL'S BRIDGE

### **Congress Location**

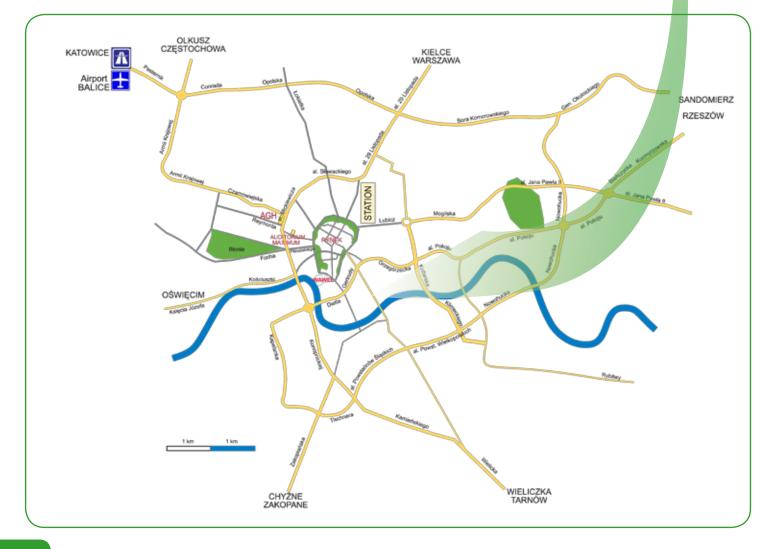
The sessions of the 21st World Mining Congress will be held in lecture halls of:

- "Auditorium Maximum" the Jagiellonian University new congress centre
- □ The AGH University of Science and Technology

Outgoing sessions will be held in:

- □ Belchatow (lignite coal mine)
- □ Lubin (copper ore mines)
- Katowice
- Wieliczka







21<sub>st WORLD</sub> MINING

**CONGRESS & EXPO 2008** 



The Congress Website:

### **Organizing Committee:**

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# 21st WORLD

Under the patronage of the President of the Republic of Poland Lech Kaczyński



(GHM) /-12





7-12 september 2008

Poland: Kraków, Katowice, Sosnowiec

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