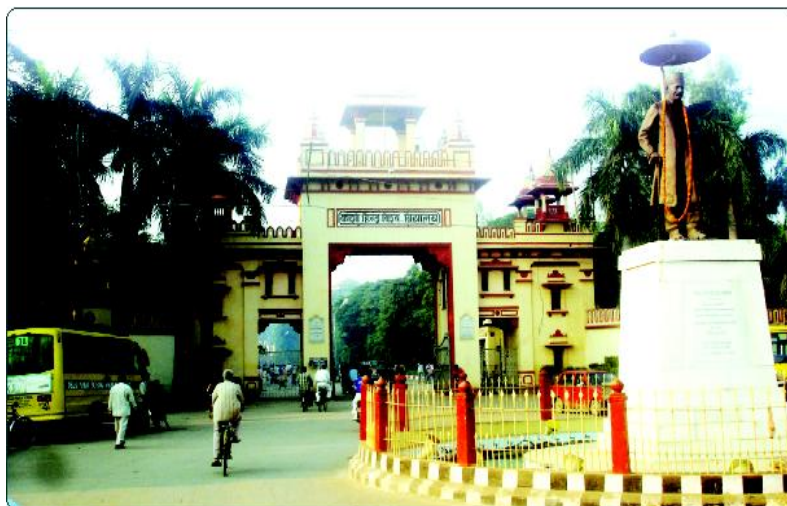


NATIONAL SEMINAR
ON
**ENVIRONMENTAL MANAGEMENT IN MINING &
ALLIED INDUSTRIES (EMMA-2008)**



7th & 8th November, 2008



Call for Sponsorship & Technical Papers

Organized by

**DEPARTMENT OF MINING ENGINEERING
INSTITUTE OF TECHNOLOGY
BANARAS HINDU UNIVERSITY
VARANASI-221 005**

NATIONAL SEMINAR
ON
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PREAMBLE

The mineral industry of India accounts for a major percentage of coal, metals, building materials, rock minerals and allied natural products. In the process to recover the mineral wealth, the associated environment undergoes change. In the economic development of the country, mining is a core industry which, if not managed well may contribute towards the pollution of environment. To strike a balance between the various mining operations and its impact on people and ecosystem, environmental protection measures introduced at the conceptual stage and their subsequent implementation may go beyond the concept of restoring pre-mining environment to a highly improved environment besides supporting the economic activity of the country. The environmental issues and the manner in which they can be resolved, are influenced by technology to be adopted, sociopolitical compulsions, resistance from native population, etc and need to be deliberated.

The manner in which India regulates its minerals industry is rapidly changing. While globalization has brought the concern for the **global society** and there are a large number of international conventions that impose obligations, the implementation of which by multinational and foreign companies pose a serious regulatory problem. These international environmental conventions will also restrict permission to mine shallow deposits and trade of metals related to the smelting industry. The Convention 1992 (Rio de Janeiro) affects access to land (endangered ecosystem and indigenous people) for mining operations. The Kyoto Protocol 1997 has significant implications for mining may contribute to energy price increases, controls on the release of carbon dioxide, methane and other green house gases and may affect coal market also. As mining generally takes place in less populated areas, techno-environmental agenda cannot be seen in isolation by under-estimating the socioeconomic problems.

This national seminar on "Environmental Management in Mining & Allied Industry EMMA-2008" is being organized at Banaras Hindu University, to provide a platform to specialists from mining industry and professionals, experts and scientists from earth sciences, life sciences etc. representatives from non-governmental organizations to discuss the different technological, geological, biotic, sociological and economic dimensions of environment in and around a mine, mineral and rock processing plants.

While the mining methods adopted shall achieve the desired levels, it should be complimentary to environmental protection measures and conservation. The impact caused by mining and allied activities upon environment should be evaluated in a realistic and precise manner at least at an interval of five years during and after the mining operations. The parameters for such evaluation should be identified and standardized for environmental assessment and appraisal. Each attribute for air, water, land and socio-economic impact need to be fixed for mineral industry and mining projects. This will help in selecting the appropriate technique for impact measurement and interpretation leading to logical conclusion on the status of various components of environment.

Management of land damages, tailings, waste dumping and reclamation, water resource, acid mine drainage, degradation of ambient air quality, migration of pollutants, weathering and siltation problems, dispersion model of dust, mine subsidence, their long term control and maintenance of permissible limit in actual practice need to receive the desired concern from the mine operators and planners. The current checks and control measures for ensuring their efficient operations need to be made compulsory. There is also a need to examine and report the status on the management of pollutants and efficiency of existing mitigation methods for improving the quality of mine environment.

The emphasis to environment management needs to be shifted from the restoration of pre-mining parameters to an improved / desired environmental condition. With a rapid growth in the cost of the minerals and the mineral consumption, there is a strong case for higher resource input to environmental upgradation. With the requisite technological resource input and commitment to protect the environment, the mining projects can become the leaders of environmental protection.

This seminar, therefore, would focus on providing technical inputs for improving the quality of mine environment in order to continue the mining operation in an eco-friendly manner.

OBJECTIVE OF THE SEMINAR

- To provide a forum for exchange of ideas and discussion among policy makers, managers, entrepreneurs, planners, administrators, practicing mining engineers, geo-environmentalist, scientists, technologists and academicians concerned for development of mining industry.
- To promote result oriented R&D programmes for developing eco-friendly technologies, which can lead to Sustainable Development.
- To assess the suitability of existing environmental assessment and management methods, techniques, practices and incorporate experiences, ideas, views, research findings to make mining industry acceptable to the adjoining population and achieve a better land use in the post mining situation.
- To create a network among various institutions and industries for devising better policies and procedures for developing technologies that have the potential for significantly improved environmental performance relative to other technologies.
- To identify areas which need urgent attention, to reduce damaging effects of mining.
- To formulate recommendation of appropriate policies, directives and guidelines to usher the growth of mining industry.
- To facilitate the harmonious knowledge transfer and provide a status of environmental management activity as perceived and implemented by mining companies, research organizations, local NGOs and environmental professionals.

ADVERTISEMENT TARIFF FOR SOUVENIR

A limited space for insertion of advertisement of various organizations in the Souvenir, which will be brought out during the seminar is being provided. Interested organizations are requested to send the advertisement material i.e. Artwork/Negative/Positive for colour or black &white advertisement along with payment as detailed below:

Back cover (coloured)	-	Rs. 15,000.00
Inside Cover (Front and Back)	-	Rs. 10,000.00
Full page (B&W)	-	Rs. 5,000.00
Half page (B&W)	-	Rs. 3,000.00
Full page (Coloured)	-	Rs. 8,000.00
Half page (Coloured)	-	Rs. 5,000.00

Stall tariff

(For products and software demonstrations related to environmental monitoring, prediction and control and on the topic of the seminar)

-	Rs. 10,000.00
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INVITATION FOR SCIENTIFIC PAPERS

The organizing committee extends the cordial invitation to policy makers, managers entrepreneurs, planners, administrators, practicing mining engineers, geo-environmentalist, scientist, technocrat, academician to participate in EMMA-2008. The authors are invited to contribute technical papers on the theme of the seminar. The selected papers, keynote addresses and theme papers presented in the technical sessions will be included in the seminar proceeding. The authors are requested to submit an extended abstract of papers, incorporating salient points not exceeding 500 words, typed in double space in A4 size paper in duplicate, mentioning the title, name (s) of the author (s), and the organization, has to reach the Convenor latest by 21st April, 2008. The full text of paper should be provided in a CD along with one hard copy. The article should not exceed 10 printed pages in single spacing in MS-word 2003, Times New Roman 12 font size. The complete paper prepared as per above guidelines to be submitted latest by 20th July, 2008.

THEMES

A. Global Environmental Issues:

- Climatic change / Local, Regional & Global warming Potential.
- Carbon emissions from fossil fuels.
- Global energy balance and green house effects.
- International conventions and their impact on Mining & allied Industry.
- Rehabilitation of eco-system, habitat and Biodiversity protection.
- Environmental issues related with gasification of coal and petroleum residue.
- Accident Free Mining & disaster management.
- Marine Pollution due to exploration and production of crude oil and natural gas.
- Diversion of rivers and interlinking of rivers and their consequences.
- Environmental ethics-Issues and possible solutions.
- Role of Geology in environmental pollution and their management.

B. Topographical changes, Land damages and deforestation:

- Landscape, visual impact, loss of landuse.
- Land subsidence and its prediction & management.
- Changes in land use pattern and their impact.

C. Case studies on Environmental Management Practices:

- Case studies in coal mines, base metal mines, Iron ore mines, Bauxite mines, Manganese mines.
- Case studies in steel, power generation and other allied industries.

D. Solid waste management in Mining and Mineral based Industries:

- Waste rock – dumping, stabilization, reclamation and restoration.
- Tailings - transportation, disposal, reclamation and related issues.
- Utilization of solid waste of mines for value added material and products.
- Hazardous solid waste in Uranium Mines – transportation, disposal and reclamation.
- Fly ash - characterization, stabilization reclamation and utilization as value added products and constructional material.

E. Mine Water pollution and Management:

- Qualitative and quantitative assessment.
- Effluent discharge - treatment and success stories.
- Surface water pollution, siltation of surface water bodies and likely impact on surrounding regimes.

F. Acid Mine Drainage:

- Prediction and management techniques of acid mine drainage.
- Migration of toxic metals, water contamination and pollution.
- Ecological and social risk assessment.
- Case studies on practical management.
- Rehabilitation of abandoned surface and underground mines.

G. Ground Water Resource Management:

- Qualitative and quantitative estimation of ground water.
- Ground water budgeting and balancing in large opencast mines.
- Artificial recharge, Rain water harvesting for raising of ground water level in mining area.
- Water shed management.
- Integrated water resource management–traditional and modern approaches.

H. Air quality in Mines and Allied Industries:

- Characterization, measurement, prediction and management of particulate matter.
- Gaseous pollutants and their management.
- CO₂ mitigation technique, isolation and utilization of methane.
- Emission of green houses gases, measurement and utilization techniques.
- Modeling and simulation of air pollution.

I. Environmental Impact Assessment and modelling :

- Techniques and trends in the quantification of environmental indices and EIA.
- Modeling and models for environmental assessment and management.

J. Socio-economic dimension and its impact on Environment:

- Socio-economic planning, rehabilitation, compensation and concerned issues of project affected people and adjoining population.

K. Underground mine environmental and safety at work place:

- Work place environment- ventilation heat and humidity, dust, noise and illumination
- Monitoring and management of dust, radiations and gases.
- Mine fires, explosions and inundation.
- Safety technologies and management.

L. Enabling Technologies for environmental Management:

- Selection of eco-friendly equipment, protection devices and material
- Information and automation for on- line monitoring and management.
- Biotechnology and nanotechnology in mining.
- Clean fuel (coal, petroleum and radioactive minerals) technology for environmental quality improvement.
- Applications of softwares, remote sensing, geographic information system (GIS).

Request for Registration

Authors of the technical papers, participants from industries, academic institutions, NGOs and consulting organizations are requested to register themselves for the seminar and sent the enclosed Registration Form duly filled in along with registration fees by 21st July, 2008.

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Registration Form

Name : _____

Designation : _____

Organization : _____

Mailing Address : _____

Phone/Mobile No. : _____

E-mail : _____

Nationality : _____

Participation Status

Delegates

Paper presentation

Sponsor/Cosponsor

Advertisement in Souvenir/Stall booking

Title of Paper : _____

Registration Fees: Enclosed

Not enclosed

D.D. No.....& Date

DD drawn in favour of **The Convenor, EMMA-2008**, payable at **Bank of Baroda, Banaras Hindu University, Varanasi-221 005**

Signature with Date

THE HOST INSTITUTION

The Banaras Hindu University established in 1916 by Pt. Madan Mohan Malviyaji is one of the most prestigious Central Universities of the country. An autonomous institution of character and repute having honorable President of India as its visitor, Banaras Hindu University is the largest residential university in Asia. Being a living embodiment of such visionaries as Pt. Madan Mohan Malviyaji, Dr. Annie Besant and Dr. S. Radhakrishnan, this national institution epitomizes a synthesis of ancient wisdom and modern scientific temper. Spread over an area of 15 sq. km, this university with its majestic buildings of monumental architectural design, a sprawling campus and lush green fields is testimony to the ingenuity and foresight of its founder Mahamanaji. This university is one of the biggest Central University with more than 150 departments and three major institutes of international repute.

The Institute of Technology is one among these three institutions. Institute of Technology (I.T., B.H.U.) formed in 1969 consists of 13 branches of engineering and 3 interdisciplinary schools. However, the engineering education in this university was started as early as in 1923. Many students of this pioneer engineering institute occupy topmost positions in large number of industries, academic institutions and research organizations in the country and abroad.

Department of Mining Engineering in particular and the university in general is attracting students from all over the country. The department, first degree awarding institution in India, came into existence in 1923, as Department of Geology, Mining and Metallurgy under Science College. The first Post-graduate course in Mining Engineering was also started in this Department in 1966. The first Ph.D. degree in Mining Engineering in the country was awarded by this department in the year 1964.

The department is actively engaged in research and development work and rendering valuable services (testing and consultancy) to the industry, research and academic institutions. It has well equipped laboratories like Mine Environment, Rock Mechanics, and Ground Control, Mine Planning and Design, Mineral Beneficiation, Exploration and Exploitation, and Mine Machinery. The department is recognized as **Centre of Advance Study in the area of Rock Mechanics, Ground control and Geo-environment.**

ACCOMMODATION

A limited accommodation is available in the University campus (Faculty Exchange Building, Gandhi Alumni Technology Centre and University Guest House). This may be booked on prior intimation depending upon the availability. A number of good hotels are also there in Varanasi, within 10 km from BHU campus.

OFFICIAL LANGUAGE

The official language of the seminar is English. However, papers and presentation are most welcome in Hindi also.

DATE AND VENUE

The seminar will be held on 7th and 8th November, 2008 at the Department of Mining Engineering, Banaras Hindu University, Varanasi U.P. (India). The University is located on the western bank of river Ganga about 10 km from Varanasi Cantt. Railway station and 20 km from Mughalsarai Jn. of Indian Railway. Varanasi Airport is located at 35 km from Banaras Hindu University.

PLENARY SESSION

Apart from the discussion of papers contributed by the experts and research workers, a number of keynote speakers will be invited, covering a range of disciplines dealing with various sub-themes of the seminar.

CALENDAR OF EVENTS

Date of submission of abstract	:	21 ^h April , 2008
Intimation of acceptance of abstract	:	19 th May, 2008
Submission of full paper and registration	:	21 st July, 2008

REGISTRATION

All those who wish to participate in the seminar are requested to fill up the attached Registration Form and return it alongwith registration fee prescribed preferably before 21st July, 2008.

REGISTRATION FEE

Delegates	...	Rs. 4,000.00
Delegates from Educational Institutes	...	Rs. 3,000.00
Non-sponsor delegates including Research Scholars	Rs. 1500.00

SPONSORSHIP

Principal Sponsor	Rs. 100,000.00	(8 delegates free)
Sponsor	Rs. 50,000.00	(4 delegates free)
Co-sponsor	Rs. 30,000.00	(2 delegates free)

VARANASI: THE HOST TOWN

Varanasi (or Benaras) is one of the oldest living cities in the world; situated on the bank of sacred river of holi Ganga. Varanasi's prominence in Hindu Mythology is virtually unparalleled. In words of Mark Twain, Banaras is older than history, older than tradition, old even than legend and looks twice as old as all of them put together. The tract of land between Varuna and Assi rivers (from which the name Varanasi originate) believed to be the holiest of all pilgrimages. It is also called the city of spiritual light (Kashi). To be in Varanasi is an experience in itself... 'an experience in self discovery... an ethereal oneness of body and soul.'

EMMA-2008

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