

Curriculum Vitae

1. PERSONAL DETAILS

Dr. Khanindra Pathak

Professor

Department of Mining Engineering
Indian Institute of Technology Kharagpur

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2. WORK EXPERIENCE :

University / Organization	Designation	From To	Total Period	Nature of Experience
Indian Institute of Technology, Kharagpur, India	Professor	July 2003-Contd.	13 years	Teaching and research, consultancy service to mining industry, Laboratory Development, Students Hall Administration, Undergraduate Programme Evaluation
PNG University of Technology, Lae, Papua New Guinea	Professor and Head	15.2.2006-Dec 2007	2 Years	Academic Development of the Department, teaching and research
Indian Institute of Technology, Kharagpur, India	Professor	July 2003-15.2.2006	2.5 years	Teaching and research, consultancy service to mining industry, Laboratory Development
IIT, Kharagpur	Associate Professor, Department of	6.11.2000-July 2003	3 years	Teaching and research, consultancy service to mining industry

	Mining Engineering			
Imperial College of Science Technology and Medicine, London	Academic Visitor, T.H. Huxley School of Environment Earth Sciences and Engineering	May 6, 2002- July 19, 2002	3 months	Collaborative research, application of research findings
Indian School of Mines, Dhanbad	Assistant Professor, Department of Mining Engineering	September, 1998- November 3, 2000	2 years	Teaching and research
Indian School of Mines, Dhanbad	Lecturer, Department of Mining Machinery	September, 1987- September 1998	11 years	Teaching and research
Imperial College of Science Technology and Medicine, London	Research Scholar, Department of Earth Resource Engineering (Under Commonwealth Academic Staff scholarship)	October 1993- November, 1996	3 years	Research in Environmental Modelling and GIS application
Central Mine Planning and Design Insitute, Coal India Limited Ranchi	Graduate Engineer (E2)	1986-1987	1 year	Planning and design of surface mines and quarries.
Neyveli Lignite corporation, Neyveli	Assistant Plant Manager (E2)	1983-1985	2 years	Operation and maintenance of Continuous surface mining system.

3. ACADEMIC QUALIFICATIONS:

Degree	University/Institution	Year	Specialization
Doctor of Philosophy (Ph.D.)	Imperial College of Science, Technology and Medicine, London	1996	Mining Engineering
Master of Technology (M. Tech.)	Indian School of Mines, Dhanbad.	1989	Opencast Mining
Bachelor of Technology (B. Tech.)	Indian School of Mines, Dhanbad.	1983	Mining Machinery
Diploma of Imperial College (DIC),	Imperial College of Science , Technology and Medicine, London	1996	Mining Engineering

4. SPECIALIZATION

Environmental Management, Remote Sensing and GIS Applications, Surface Mining, Mining Machinery, Maintenance Management,

Special Interest: Pedagogy and Teaching & Learning in Higher education

5. POST-PHD ACADEMIC OR INDUSTRY WORK EXPERIENCE (EXCLUDING VISITING APPOINTMENTS), TOGETHER WITH ORGANIZATION NAME, POSITION HELD, DURATION:

University / Organization	Designation	From To	Salary	Total Period	Nature of Experience
Indian Institute of Technology, Kharagpur, India	Professor	July 2003-Contd.	57340/- + G.Pay 10500/-	3 years	Teaching and research, consultancy service to mining industry, Laboratory Development, Students Hall

					Administration, Undergraduate Programme Evaluation
PNG University of Technology , Lae, Papua New Guinea	Professor and Head	15.2.2006 -Dec 2007		2 Years	Academic Development of the Department, teaching and research
Indian Institute of Technology, Kharagpur, India	Professor	July 2003- 15.2.2006		2.5 years	Teaching and research, consultancy service to mining industry, Laboratory Development
IIT, Kharagpur	Associate Professor, Department of Mining Engineering	6.11.2000- July 2003		3 years	Teaching and research, consultancy service to mining industry
Imperial College of Science Technology and Medicine, London	Academic Visitor, T.H. Huxley School of Environment Earth Sciences and Engineering	May 6, 2002- July 19, 2002		3 month s	Collaborative research, application of research findings
Indian School of Mines, Dhanbad	Assistant Professor, Department of Mining Engineering	Septembe r, 1998- Novembe r 3, 2000		2 years	Teaching and research
Pre-PhD Work Experience					
Indian School of Mines, Dhanbad	Lecturer, Department of Mining Machinery	Septembe r, 1987- Septembe r 1998		11 years	Teaching and research

Imperial College of Science Technology and Medicine, London	Research Scholar, Department of Earth Resource Engineering (Under Commonwealth Academic Staff scholarship)	October 1993- November, 1996		3 years	Research in Environmental Modelling and GIS application
Central Mine Planning and Design Insitute, Coal India Limited Ranchi	Graduate Engineer (E2)	1986-1987		1 year	Planning and design of surface mines and quarries.
Neyveli Lignite corporation, Neyveli	Assistant Plant Manager (E2)	1983-1985		2 years	Operation and maintenance of Continuous surface mining system.

6. VISITING ACADEMIC OR INDUSTRY APPOINTMENTS (OF 3 MONTHS OR MORE), TOGETHER WITH ORGANIZATION NAME, POSITION HELD, DURATION:

- a. In 1998 for three months as Post –Doc Research Scholar at Imperial College, London .
- b. In 2002 for 3 months to assist Prof. S. Durucan, Imperial College for development of environmental noise maps of Republic of Ireland

7. ADMINISTRATIVE EXPERIENCE AS DEAN/HOD/HEAD OF R&D, TEAM-LEADER, ETC. (OF 12 MONTHS OR MORE), TOGETHER WITH ORGANIZATION NAME, POSITION HELD, DURATION:

Details of administrative experience:

1. **HOD of Department of Mining Engineering, University of Technology, Lae, Papua New Guniea,** (member of various committees of the University run as per the patterns of Australian Education Administration). From **February 2006 to December 2007**

2. **Member of Senate, IIT Kharagpur** since 2003, was member of Board of Course Studies at ISM, Dhanbad 1993, 1997, was of **Post Graduate member Research Committee** at IIT Kharagpur (2005-2006), was member of Governing Body of North East Regional Institute of Science and Technology (NERIST), Arunachal Pradesh, India (2005-2006). Member of the **Library Management Committee** of IIT Kharagpur and **In-Charge of Departmental Library** and participate in the library purchase and decision making. I was also In Charge of Departmental Library at the Department of EMM, ISM Dhanbad.
3. Member of **Undergraduate Programme Evaluation Committee** of IIT Kharagpur, Member of Departmental Purchase Committee of Department of Mining Engineering, IIT Kharagpur,
4. **Warden of Students Hostel at IIT Kharagpur and at ISM Dhanbad.** At ISM, Dhanbad, I introduced computerized hostel admission system in 1998 as warden of first year students. I introduced computerized election of Hall Council Members at Petal Hall, IIT Kharagpur in 2001-2002. Assistant Warden of Patel Hall, IIT Kharagpur , 2001-2003, Warden, HJB Hall, 2009-2011
5. Member of Committee for study on possibility of distance mode of education at IIT Kharagpur, 2011
6. Professor –In charge for development and experiments design for the following laboratories at the Department of since 2008 for introducing new courses in the Department of Mining Engineering.
 - a. RS and GIS Laboratory
 - b. Mining Machinery Laboratory
 - c. Bulk Material Handling Laboratory
7. Program Officer of NSS at ISM Dhanbad.
8. Faculty Sponsor of SPE Students Chapter IIT Kharagpur
9. Faculty Adviser of 2008 batch of undergraduate students of Department of Mining Engineering
10. Coordinator of undergraduate projects for the Department of Mining Engineering since 2008-2013

8. AWARDS, HONORS, (MAJOR) SCHOLARSHIPS:

Academic or Professional Awards

1. Recipient of National Scholarship (India) from 1976-1983
2. Recipient of Commonwealth Academic Staff Scholarship during 1993-1996
3. **Smt Bala Tandan award for the year 2007-2008** for contribution in upgrading the quality of life in mining environment by Mining, Geological and Metallurgical Institute of India (MGMI)
4. **Sir John Dunn Medal** from MGMI for 2008-2009
5. **Life Time Achievement Award** for teaching and research from Indian Mining and Engineering Journal June 2014.
6. **National Geoscience Award 2014 (awarded on April 3, 2016 by the hands of the President of India, a citation and Rs 5 lakh)**

9. RESEARCH CONTRIBUTIONS (PHD STUDENT'S GUIDANCE):

4 PhD completed, 4 under progress.

10. RESEARCH CONTRIBUTIONS (SPONSORED R&D GRANTS):

No	Title of Project	Sanctioned Grants (x10 ⁵ INR)	Sponsoring Agency	Present Status Dates of Starting and Completion
1.	Social audit of karo expansion OCP of central coalfields limited	3.45	CCL	Completed Commencement: 02-09-2016 Completion: 01-10-2016
2.	Preparation of LULC Report & Maps For Mclellan (823.617 Ha), Ajitaburu (323.887 Ha), Dhobil (513.036 Ha) & Sukri Luturburu (609.554 Ha) Mining Leases Of Manoharpur Ore Mines, Chiria	0.46	SAIL	Completed Commencement: 16-08-2016 Completion: 16-10-2016
3.	Demonstration of community participation model for economic development and nutrition health management through organic farming and education Co-Investigator	49.6	ECL	Commencement: 22-11-2014 Completion: 21-11-2017
4.	Investigation on iron ore mine site restoration and species performance in spoils dumps slope stabilization with Vetiver System Technology (as Co PI with Kolkata University)	22.36	CSIR	On Going 1.3.2014-31.3.2017

5.	DEVELOPING SUITABLE PEDAGOGICAL METHODS FOR VARIOUS CLASSES, INTELLECTUAL CALIBERS AND RESEARCH IN E-LEARNING ICE - MAIN PHASE (Co-PI)	1600.00	MHRD	On Going 28-03-2013- 27.03.2016
6.	DEVELOPMENT OF RS-GIS BASED DATABASE FOR URANIUM MINING IN THE WEST KHASI HILLS DISTRICT, MEGHALAYA	31.97	BRNS	Completed 01-04-2009-31-08- 2013
7.	Study of the Behavior of Oil Spill on Ocean Surface through Laboratory experiments, modeling and Satellite Image	78.0	Ministry of Earth Science, Gol	Completed 2010-2013
8.	Hotspot mapping using GIS at Korba area, Sponsored by Space Application Centre (SAC), ISRO, Govt. of India	14.0	ISRO	Completed 2005-2007
9.	Investigation of soil and water contamination vis-à-vis land use changes near mining fields of Tinsukia District, Assam	5.75	CPCB	Completed May 2003 May 2005
10	Development of RS and GIS based DSS for planning mine closure	11.56	ISRO	Completed 1-12-2001 1-12-2004

11. RESEARCH CONTRIBUTIONS (PUBLICATIONS):

Number completed: 91

a. Publications in journals: **43**

b. Publications in proceedings of seminars/conferences: **58**

c. Books and Monographs: **Two (by Prentice Hall India and Cygnus Kolkata)**

d. Chapter of Book: Two, of which one in **Encyclopedia of Life Support System**
Published by UNESCO (www.eolss.net/ebooklib/ebookcontents/E6-38A-ThemeContents.pdf)

12. CONSULTING ASSIGNMENTS PAID FOR BY INDUSTRY OR GOVERNMENT:

No	Title of Project	Sanctioned Grants (x10 ⁵ INR)	Sponsoring Agency	Present Status Dates of Starting and Completion
1.	Monitoring & maintenance of existing vetiver at Joda mines	5.09	Tata Steel	Commencement:30-10-2014 Completion:29-10-2015
2.	Demonstration project of application of vetiver system technology (VST) for erosion control and stabilization of overburden dumps and augmentation of green cover development at SCM, Tata Steel Limited	19.66	Tata Steel	Commencement:15-06-2014 Completion:14-06-2015
3.	Preparation of comprehensive cat plan for the Saranda forest area fed by Karo and Koina river system with specific measures and cost structure for implementation	75.28	SAIL	Commencement:04-11-2013 Completion:31-03-2015
4.	Demonstration project of application of vetiver system technology for erosion control and stabilization of overburden dumps and augmentation of green cover development at Bamebari Mn. Mines	14.60	Tata Steel	Commencement:11-10-2014 Completion:10-10-2015
5.	Study of reports of impact on mining on Chittorgarh fort	8.98	Aditya Birla Group	Completed 22.12.14- 31.01.15

6.	Slope stabilization by vetiver system technology at Joda iron ore mines	24.0	Tata Steel	20.01.2012-20.07.2012
7.	Erosion control from slopes of spoil dumps and dump slope stabilization by vetiver plantation at Joda (extension)	14.60	Tata Steel	On Going 16-06-2013- 15-06-2014
8.	Implementation of vetiver system technology for erosion control and slope stabilization at Sanjem mine	16.85	Fomento	On Going 12-08-2013 11-05-2014
9.	Consultancy service for field trial of vetiver grass on old fines dump slope of Bolani ore mines	11.23	SAIL	Completed 10-02-2013- 09-11- 2013
10.	RS-GIS based environment management for duarguiburu lease of Gua Ore Mines of RMD-SAIL.	14.49	SAIL	Completed 04-02-2013- 04-06- 2013
11.	Experiment on rapid forest generation at mine site by Miyawaki method	14.32	Tata Steel	On Going 01-03-2013- 01-03- 2014
12.	<i>Stability and strength test for Q-o, Dungri limestone Quarry</i>	1.65	ACC	Completed 10.12.2011-2012
13.	<i>Scientific study of establish techno-economic viability of use of surface miners at NALCO mines</i>	8.60	NALCO	Completed 01-08-2009- 01-12- 2009
14.	Hydroponic vetiver treatment of effluent water in IOCL-BGR	10.11	IOL BGR	On Going 01-03-2013- 01-03-2014
15.	Vetiver plantation at noamundi iron mines	1.70	Tata Steel	Completed 23-07-2012-22.07.2013
16.	Study of Dump Stability at Sukinda Chromite Mines, Tata Steel	12.22	Tata Steel	Completed 2010-2011

17.	Study on intensity of noise and vibration due to non-blasting mechanical mining operations.	9.83	<i>Birla Cement</i>	Completed 20.12.2012-28.02.2013
18.	Green House Gas Emission: Assessment of Coal Bed Methane Potential	116.38	<i>EU</i>	On Going 01.10.2011-31.08.2015
19.	Performance Measurement of Surface Miner and Cost Benefit Analysis	3.9	<i>NALCO</i>	Completed July, 2010
20.	RS-GIS Based Catchment Area Treatment Plan, Vegetation plan and Environmental Time series Analysis of Gua Ore Mines, SAIL	12.9	<i>SAIL</i>	Completed 04.02.2013-04.06.2013
21.	Consultancy by IIT-KGP for compliance of FC & EC Conditions of KIOM-MIOM,	22	<i>SAIL</i>	Completed 2010-2011
22.	RS-GIS Based Catchment Area Treatment Plan and Vegetation plan and Manaoharpur Iron Ore Mines, Chiria, (Consultancy by IIT-KGP for compliance of FC & EC Conditions of Manaoharpur Iron Ore Mines, Chiria,)	11.5	<i>SAIL</i>	Completed 14.09.2011-14.03.2012
23.	Study on CO ₂ sequestration in India	19.27	<i>NTPC</i>	Completed 2009
24.	Environmental management for fine discharge to river from fine heaps of iron ore at Gua Mines	1.0	<i>SAIL</i>	Completed 2009
25.	Remote Sensing and GIS Based data infrastructure for baseline environment for new uranium mining sites, Sponsored by Department	34.0	<i>BRNS</i>	Completed 2006-2009

	of Atomic Energy (DAE), Govt. of India.			
26.	Failure mechanism of Walking dragline	2.6	MCL	<i>Completed</i> <i>Dec 2002- May 2003</i>

13. RECENTLY CONDUCTED SHORT TERM COURSES (2009-2014)

Year	Sl. No.	Name of the STC	Duration
2009	01	"Surface Mining : Safety and Productivity"	10 – 14 August, 2009
	02	"Mining Machinery: Maintenance and Capacity Utilization"	12 - 14 October, 2009
2010	01	"Surface Mining : Safety and Productivity"	15 – 17 September, 2010
	02	"Machinery for Mining and Bulk Material Handling: Selection, Maintenance and Modernization"	18 – 20 November, 2010
2011	01	"Mine Closure Planning and Environmental Management : Remote Sensing & GIS Application"	11 – 14 January, 2011
	02	"Mine Closure Planning and Environmental Management :Remote Sensing & GIS Application"	25-27 February, 2011
	03	"Transportation and Handling of Bulk Materials (in Mines, Ports and Plants)"	28-30 July, 2011
	04	Handling of Fine Ores & Pelletization (Outstation Short Term course)	19 -20 September, 2011
	05	"Fragmentation & Excavation in Mines & Quarries"	21-23 October, 2011
2012	01	"Mine Site Restoration CSR & Vetiver System Technology"	27 – 29 April, 2012
	02	"Surface Mining: Safety and Productivity"	17 -19 October, 2012

2013	01	"Remote Sensing & GIS Application for Environmental Management and Mine Closure Planning"	28 – 31 January, 2013
	02.	"Mineral Economics and Mining Finance"	16 – 19 July, 2013
	03.	"Post Mining Mine Site Restoration: Reforestation, CSR and Vetiver System Technology"	14 – 16 November, 2013
2014	01	Training on pedagogy for teachers Mining Engineering Departments from various Institutions	08-10 January 2014
	02	"Mine Closure Planning and Post - Mining Mine Site Restoration: CSR-EMP Integration"	06 - 08 March 2014
	03	Surface Mining Safety & Productivity	21-23 August 2014

14. PATENTS ISSUED OR FILED: NIL

15. CONTRIBUTIONS TO TECHNOLOGY TRANSFER OR TO ENTREPRENEURSHIP:

Introduced Vetiver system technology for erosion prevention and slope stabilization in spoil dumps of surface mines. The method first experimented at Joda Mines Tata Steel is now being practiced in many mines in private and public sector. Being happy with the results, Tata Steel even acknowledged by naming it as Khanindra Method. The approach has solved one of the big problems of mining industry.

16. EXPERIENCE IN ENGAGING WITH INDUSTRY, ALUMNI, GOVERNMENT, TOGETHER WITH ORGANIZATION NAME, NATURE OF ENGAGEMENT, DURATION:

Worked with Neyveli Lignite corporation and Coal India Limited for about 4 years before joining academics. I was actively involved with ISM Alumni Association's Executive committee during 1996-2000. I have been offering consultancy services to NTPC, SAIL, Tatasteel etc. Served UPSC as examiner and also as member of recruitment committee.

17. SERVICE TO YOUR PROFESSION (REFEREE FOR JOURNALS, CONFERENCES ORGANIZED, ETC.):

Referee of Institution of Engineers JI (Mining), Mining Engineering (US). Associated with Indian Mining and Engineering Journal, served as member of organizing committee of many National and International Conferences.

18. CONTRIBUTION TO PROFESSIONAL WORK AS MEMBERS OF COMMITTEES:

At present I am member of the Mentor council for Sub Committee for Mining and Metallurgy formed by Ministry of Labor, Govt of India.

19. INVITED TALKS, ETC.

Delivered number of invited talks at different Institutions in India and abroad, some of them are :

1. CSE's workshop on "ENVIRONMENTAL ASSESSMENT CAPACITY BUILDING IN SOUTH ASIA" from 18th – 20th February 2015 on 19th Feb at India Habitat Centre , New Delhi
2. Dibrugarh University, Assam: for training the faculty members on application of pedagogy in curriculum design and use of MOODLE for delivery of curriculum
3. NIT Warrangel: on curriculum Development and Pedagogy
4. IIT Roorkee: Concept Mapping approach of Curriculum development
5. NIT Silchar: Training of faculty members on Planning and design of courses and lesson plan
6. BIT Mesra: Training of faculty on curriculum development
7. Tezpur University: Application of Remote Sensing and GIS for Disaster Management
8. Guwahati University: Role of teachers in Higher education, ICT applications in class room
9. Guru Ghasidas Institute of Technology: Remote sensing and GIS
10. ISM Dhanbad: Environmentally friendly mining
11. NMDC, Tata Steel: Vetiver system Technology for erosion prevention and slope stabilization
12. SAIL: Pelletization of iron ore fines
13. Office of the PCCF, Jharkhand for the DFOs: RS-GIS based Catchment Area Treatment Planning
14. Kiyushu University, Japan: Bulk Material Handling in India
15. Leoben University, Austria: Mining in India
16. CII in Delhi and at Hyderabad : Mine site restoration after mine closure and CSR-EMP integration using vetiver system approach
17. IUCN in Delhi: Vetiver system Technology for slope stabilization and erosion prevention

20. OTHER SIGNIFICANT CONTRIBUTIONS TO TEACHING/LEARNING RESOURCES, RESEARCH, YOUR INSTITUTION, YOUR PROFESSION, OR COMMUNITY

I am working as Co-PI of MHRD , GoI sponsored pedagogic project for development of curriculum. The work can be seen at http://www.ide.iitkgp.ernet.in/Pedagogy1/pedagogy_main.jsp. I have developed number of short term courses for the mining industry particularly for surface mining, mining machinery and bulk material handling. My co-authored book on Maintenance Engineering, published by Prentice Hall has got its 10th edition. I have developed e-learning materials and video lectures on my subjects. I have trained more than 300 teachers of higher education on pedagogic approaches. I was actively involved in NSS and served as President of Bharat Vikas Parishad of Kharagpur Chapter and contributed for community causes.

I have been contributing to interdisciplinary research and guided students for PhD with different background.

Prof. Khanindra Pathak

21. PUBLICATIONS

International Journals

1. Pathak, K., Dasgupta, K. and Chattopadhyay, A., 1992
Determination of the Working Zone of Dragline Bucket-A Graphical Approach, Mining Technology, JI of Mining , Mechanical and Electrical Engineers, UK, February 1992.
2. Pathak, K., Durucan, S. and Kunimatsu, S., 1999
Activity Accounting Technique for assessment of noise in mechanised surface mining, JI of Environmental Monitoring and Assessment, Vol. 56, pp 241-256
3. Bhattacharya, S., Pathak, K., Konar, M. M. and Bandopadhyay, P., 1998
Bin Discharge Characteristics of Crushed Coal- An Experimental Study, Braunkohle, Issue No. 6, November, 1997.
4. Pathak, K., 1998
Application of Safety Engineering for Reduced Risk of Haulage Accidents in Surface Coal Mining using Dump Trucks, SME transactions, Vol 304, pp.1-5
5. Pathak, K. , S. Durucan and A.Korre, 2000
Development of an air attenuation model for noise prediction in surface mines and quarries, International Journal of Surface Mining, Reclamation and Environment (ISSN 1389-5265), Vol. 14, No. 3.
6. K. Dey, Pathak, K. and P. Sen, 2000
Continuous Surface Miner in Indian Surface Coal Mining-A Case study Surface Mining, Braunkohle& Other Minerals , 4/2000, pp. 371-376
7. P. Sen and K., Pathak, 2001
Neural Network Aproach for Surface Mining Design, Surface Mining, No. 3, Vol. 53, July-Sept, Trans Tech Pub. ISBN 0931-3990, pp. 347-350.
8. Das, D. and Pathak, K
Land Cover Change Detection Using Landsat TM and IRS-ID LISS III Images: An application to assess impacts of mining on forest cover, Indian Jlo f Environmental Protection, Vol. 25, No. 4, ISSN 0253-7141, pp. 300-307.
9. Pathak K, (2004),
NOISE LEVEL MONITORING, in Environmental Monitoring, [Eds. Hilary I. Inyang, and John L. Daniels], in *Encyclopedia of Life Support Systems .*] [Retrieved April 20, 2011]
10. Rao, P. M. and Pathak, K., 2005
Socio-economic impact of mine closure: a case study using satellite imagery. International journal of Environmental Studies,(ISSN0020-7233), Vol 62, 2005.
11. Pathak, K., 2006
Mineral Education in PNG and Department of Mining Engineering at PNG University of Technology, Lae, PNG Resources, JI of Energy Publications, December, Australia.
12. Baruah, D. and Pathak, K. 2011

- Brownfield redevelopment of coal mine areas: a study for an alternate land use solution, Journal of Mines, Metals & Fuels, pp. 280-293,298, ISSN 0022-2755*
13. Mali, V.K., Pathak, K., Tiwari, K. and Tripathy, S. K., 2013
Land Restoration measures in top hilly mines affected watershed using remote sensing and GIS, Intl. JI of Civil, Structural, Environmental and Infrastructure Engineering Research and Development (IJCSEIRD) vol. 3 Issue 2 June 2013 pp 223-236
 14. Jain, P., Pathak, K, Tripathy, S., 2013
Possible Source-sink Matching for CO2 Sequestration in Eastern India, Energy Procedia, Volume 37, 2013, Pages 3233-3241
 15. Mallikarjun Rao Pillalamarry, Khanindra Pathak, 2014
Latent Variable Modeling Approach for Assessing Social Impacts of Mine Closure, Open Journal of Applied Sciences, 2014, 4, 573-587 Published Online December 2014 in SciRes. <http://www.scirp.org/journal/ojapps> <http://dx.doi.org/10.4236/ojapps.2014.414057>
 16. Patowary, M., Rajakumar, A., Pathak, K., 2014
Chemical modification of hygroscopic magnesium carbonate into superhydrophobic and oleophilic sorbent suitable for removal of oil spill in water, Applied Surface Science, Volume 320, 30 November 2014, Pages 294-300
 17. Patowary, M., Rajakumar, A., Pathak, K., 2014
Superhydrophobic and oleophilic barium sulfate material for oil spill clean-ups: Fabrication of surface modified sorbent by a one-step interaction approach, Journal of Environmental Chemical Engineering, Volume 2, Issue 4, December 2014, Pages 2078-2084

International Conference

1. Pathak, K. and Ghose, A. K., 1994
Drillability of Indian Coalmeasure Strata, Asian Mining, 1993, pp. 659-670.
2. Pathak, K. and Ghose, A. K., 1994
Abrasivity of Indian Coal Measure Rocks and Wear of Drill Bits, Proc. of the third international symposium on mine planning and equipment selection, Istanbul, Turkey/ 19-20 October 1994, pp. 477-482.
3. Pathak, K., Durucan, S. and O'Reily, B, 1995
Modelling and Prediction of Far-Field Noise Levels Near Mechanised Quarries and Surface Mines, Proc. of EuroNoise 95, An International INCE Symposium, Lyon, France, 21 -23 March 1995, Vol. 1., pp. 237-244.
4. Pathak, K., Kunimatsu, S., Durucan, S. and O'Reily, B, 1996
Impacts of Environmental Noise Due to Front End Loader and Dump Truck Operation in A Quarry -A Case Study, Proc. of Noise and Planning, the 1996 International Congress on " Acoustic applied to planning from technical standards to environmental standards", Pisa, Italy, pp. 209-213.
5. Pathak, K., Durucan, S. and Kunimatsu, S., 1998
The Development of a Source Characterisation Model for the Prediction of EnvironmentalNoise near Surface Mines and Quarries, Proc. of APCOM 1998 in London.

6. Durucan, S., Pathak, K., B. O. Reilly and Kunimatsu, S., 1998
Environmental Noise near a Processing Plant: -A Case Study, Proc. Fifth International Symposium on Environmental Issues and Waste Management in Energy and Mineral Production, Ankara, Turkey May 18-20, 1998.
7. A. K. Mishra, M. K. Gupta and Pathak, K. , 2000
Solid Waste Management in Opencast Mining Site after Mine Closure, Proc. of the Intl. Conference on Technology Management for Mining Processing and Environment (TMMPE 2000), Dept. of Mining Engineering, IIT, Kharagpur, 1-3 December, pp. 235-243.
8. I.N. Sinha, N. C. Krmakar, Pathak, K. , and P. K. Banik, 2000
Environmental Management Capacity Building by Bring in International Expertise: A Strategic Approach for Indian Mineral Sector, Proc. of the Intl. Conference on Technology Management for Mining Processing and Environment (TMMPE 2000), Dept. of Mining Engineering, IIT, Kharagpur, 1-3 December, pp. 155-162.
9. Rowmuria, V. K., Pathak K. and Bhattacharya, A. K. 2004
Detection of Temporal Land-use Changes in and around Opencast Mining using High-Resolution Indian Remote Sensing Data, Proceedings of the International Conference on Technology and Management for Sustainable Exploitation of Minerals and Natural Resources (TAMSEM) 2004, Department of Mining Engineering, IIT Kharagpur, February 5-7, 2004, pp. 353-367.
10. Pathak, K. and Rowmuria, V. K. 2004
Remote Sensing and GIS based technique for land use Change Detection for Mine closure planning inputs: A case study, Proc. Environmental Issues and Waste Management in Energy and Mineral Production, SWEMP 2004, Ed. Pasamehmetoglu, A. G., pp. 263-268, published by KozanOfset, 0.312.384 2003 Ankara, ISBN: 975-6707-11-9.
11. Pathak, K. and Rowmuria, V. K., 2004
Remote Sensing and GIS based technique for land use Change Detection for Mine closure planning inputs: A case study, Proc. Environmental Issues and Waste Management in Energy and Mineral Production, SWEMP, Antalya, May 17-22, 2004, pp. 263-268, published by KozanOfset, 0.312.384 2003 Ankara, ISBN: 975-6707-11-9
12. Rao, P. M and Pathak, K. 2005
Land surface temperature retrieval in mining area using LANDSAT TM5, Proc. Intl Symposium on Advances in Mining Technology and Management, November 30-Dec 2, 2005, IIT Kharagpur pp.383-386
13. Sharma, S. P. and Pathak, K. 2005
Outsourcing in Indian Coal Mining Industry: Threat, Prospect and Directions, Proc. Intl Symposium on Advances in Mining Technology and Management, November 30-Dec 2, 2005, IIT Kharagpur pp. 683-686
14. Arpa, G and Pathak, K. , 2006
Underground mining systems in Papua New Guinea, Proc. 4th Intl. Workshop on on Earth Science and Technology, Department of Earth Resources Engineering, Faculty of Engineering, Kyushu University, Fukuoka Japan, Fukuoka, December 4th - 5th, 2006.
15. Pathak, K. , 2007,
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