RESUME

1. Name in Full **: Dr. BISWAJIT SAMANTA**

2. Designation **: Associate Professor**

3. Present Address

   : Dept. of Mining Engg.
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4. Permanent Address   : Vill – Southpara,
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   India

5. Nationality   : Indian

6. Educational Qualifications:

Examination passed	Year of passing	University/ Institution	Class/Division	Scholarship if any, held
Higher Secondary (10+2)	1990	W.B.C.H.S.E.	1st	National Loan Scholarship
B.E. (Mining Engg.)	1994	B.E. College, Calcutta University	1st	National Scholarship
M. Tech. (Mining Engg.)	1996	IIT, Kharagpur	1st	GATE Scholarship
Ph.D. (Mining Engg.)	2001	IIT, Kharagpur	------	Institute Scholarship

7. Professional Experience:

Nature of Experience	Organization	Designation	From	To	Total Period
Teaching	IIT Kharagpur	Associate Professor	3rd Nov., 2011	continuing	---
Teaching	IIT Kharagpur	Assistant Professor	2nd Jan, 2008	2nd Nov. 2011	5 year 10 month
Research	Univ. of Alaska, Fairbanks	Adjunct Faculty	05th May, 2008	18th July, 2008	two and half month
Teaching	Indian Institute of Technology, Kharagpur, India	Visiting Faculty	5th July, 2004	Continuing	1 year 6 month
Post-doctoral Research	Univ. of Alaska, Fairbanks, USA	Post-doctoral Research Associate	Sept., 2002	June, 2004	1 year 2 month
Post-doctoral Research	OGI school of science and Engg., USA	Post-doctoral research associate	Sept., 2001	Aug., 2002	1 year
Research Assocaite	CSIR (IIT, KGP)	Post-doctoral Research Associate	Nov., 19991	Aug., 2001	1 year 10 month

8. Teaching Experience (subject taught)

-Principles of Mine Planning
-Resource Evaluation and Geostatistics
- Economics of Mineral Enterprises
- Mine Ventilation
- Quantitative Decision Making
-Simulation of Mining Systems
-AI Techniques in Mineral Industry

9. Membership of professional bodies:

-Society of Mining Engineering, USA

- Mining, Geology, Metallurgical Institute of India

- Institute of Engineers

10 Awards and Profession Recognition

- APCOM RECOGNITION AWARD, International APCOM Council 2015

- Co-convernor, 34th International Conference of Safety in Mines Research Institutes, held at New Delhi, 2011

- Associate Editor, Mining Engineering SME, USA 2010

- Associate Editor, Transactions of SME, USA 2010

- Editorial Board Member, International Journal of Wireless Engineering and Communication technology, 2011

- DST young scientist DST, New Delhi 2005

- MGMI Silver Medal for the year 1996 for the technical paper "Human Factors Application in Mining: A Case Study", MGMI, India 1996

- MGMI Bronze Medal for the year 1998 for the technical paper "A Model for Quantitative Assessment of Blending", MGMI, India 1998

- Acted as an Executive Committee Member of the International conference-Application of Computers and Operations Research (32nd APCOM) held at Arizona, USA, 30th March- 1st April, 2005, APCOM 2005

- Acted as an organizing committee member, APCOM held at Alaska, Fairbanks SME 2015

- Acted as an International Advisory committee member of World Mining Congress, 2016.

11. Research Guidance

No. of PhD candidates -06

No. of M. Tech.-   28

12. Book Written

Safety in Mines, Proceedings of 34th ICSMRI, Mcminal Publisher, editors: A. Bhattacherjee, B. Samanta, A. Patra, 860p.

13. Sponsored Research and Consultancy projects undertaken

<div align="center"><u>**Research and Consultancy Projects**</u></div>

No.	Funding Agency	Title of project	Duration	Investigators
Research Projects				
1	STC	**Assessment and Implementation of Complex Image co-registration and phase unwrapping and wavelet based phase noise reduction for interferometry processing**	2016-2018	D. Chakravarty, B. Samanta, J. Maiti
2	STC	**Application of INSAR satellite for ground movement monitoring**	2011-2013	D. Chakravarty, B. Samanta
3	Ministry of Mines	**Recoverable reserve estimation using non-gaussian copula based ore body simulation along with open pit and stope optimization** techniques	2014-2017	B. Samanta Md. Aqquiddin
4	DST	**Mine Ventilation Experiments: National Mission Project on Virtual Labs**	2010-2012	D. Chakravarty, B. Samanta
5	STC	**Use of Hyperspectral imaging for mineral potential Mapping**	2010-2012	D. Chakravarty, B. Samanta
6	DST	**Optimal Selection of Radial Basis Function Network for Orebody Modeling Using Multiobjective Genetic Algorithms**	2006- 2009	B. Samanta

7	BRNS	**Remote Sensing and GIS Based Data Infrastructure for Base Line Environment for New Uranium Mining Site**	2006-2009	D. Deb B. Samanta
8	SERC, DST	**Risk based Mine Production Scheduling Using Conditional Simulation and Genetic Algorithms for Ore Grade Control**	2005- 2008	B. Samanta A. Bhattacherjee
9	ISIRD	**Investigation of Ensemble Modeling Approach of Multiple Networks Using Negative Correlation Learning for Orebody Modeling**	2006- 2009	B. Samanta
10	MHRD	**Pedagogy Project: Mine ventilation**	2009-2012	B. S. Sastry, B. Samanta
11	MMS, USA	**Stochastic Simulation using Gaussian Markov Random Model and Sequential Gaussian Simulation Algorithm: An Application to Nome Gold Reserve**	2003-2004	Sukumar Bandopadhyay, B. Samanta
12	MMS, USA	**Reserve Definition Model for Goodnews Bay Platinum Deposit**	2003-2004	Sukumar Bandopadhdya, B. Samanta
13	MMS, USA	**Neural Network Optimization and its Application to Nome Offshore Placer Deposit**	2002-2003	Sukumar Bandopadhyay, B. Samanta
14	MMS, USA	**Addressing Sparse Data Issue in Nome Placer Deposit**	2002-2003	Sukumar Bandopadhyay, B. Samanta
15	NSF, USA	**Application of Statistical Signal Processing and Pattern Recognition Technology to Environmental Observation and Forecasting System**	2001-2002	Todd. K. Leen, B. Samanta
16	CSIR, India	**Planning and Design for Grade Control using Genetic Algorithms**	1999-2001	Ashis Bhattacherjee, B. Samanta
		Consultancy Projects		
17	HEL	**Study of baseline data of geo-environmental parameters due to ash filling in the plant premises of Haldia Energy Ltd.**	2015-2016	D. Chakravarty B. Samanta.
18	MOIL	**Ventilation studies of deeper levels of Chikla Mine**	2015-2016	B. S. Sastry B. Samanta

19	RSPL	**Design Consultancy for the construction of Tailings pond at Sanindpur iron and bauxite mines- desing and slope stability analysis**	2012-2012	D. Chakaravarty, B. Samanta, B. S. Sastry
20	MMIPL	**Numerical Modeling in 3-Dimension for subsidence prediction for Lawa Underground Mines of MMIPL**	2013-2013	D. Chakravarty B. Samanta
21	FACOR	**Planning for future ventilation systems at Boula and Kathpal Mines (FACOR) (PFVS)**	2011-12	B. S. Sastry, B. Samanta
22	SAIL	**Study of Suitability of MMV for Chasnalla Deep Mine**	2014-2014	B. S. Sastry, B. Samanta, D. Chakravarty
23	MOIL	**Ventilation Reorganisation study at Gumgaon Mine, MOIL**	2013-2013	B. S. Sastry, B. Samanta
24	BICO	**Design consultancy for the construction of Tailing pond at Teherai Iron & Mn. Mines - Design and Slope stability Analysis (DPTD)**	2012-2012	D. Chakaravarty, B. Samanta, B. S. Sastry
25	BICO	**Design consultancy for the construction of Tailing pond in Nadidih Iron & Mn. Mines-Design and Slope stability Analysis (CIMA)**	2012-2012	D. Chakaravarty, B. Samanta, B. S. Sastry
26	SECL	**Determination of IPT and CPT for Coal Seams of Jhilimili Colliery (DICS)**	2011-2012	B. Samanta, B. S. Sastry
27	Jindal Power Limited	**Geo-environmental impact assessment of FG ash dump (FGAD)**	2012-2012	D. Chakaravarty, B. Samanta, B. S. Sastry
28	Jindal Power Limited	**Stability Analysis of the Embankment of the Fly Ash-Dyke in Jindal Power Limited. (SAEF)**	2011-2012	D. Chakaravarty, B. Samanta, B. S. Sastry
29	RSPL	**Design consultancy for the construction of Tailing pond at Oraghat Iron Ore Mines-Design and Slope stability Analysis. (PODS)**	2012-2012	D. Chakaravarty, B. Samanta, B. S. Sastry

30	Free grade Co. Ltd.	**Design consultancy for the construction of Tailing pond at Nadidih Iron & Mn. Mines-Design and Slope stability Analysis. (DPNI)**	2012-2012	D. Chakaravarty, B. Samanta, B. S. Sastry
31	M/s. Jayaswal Neco Urja Limited	**Planning and monitoring scheme for heavy metal in and around the ash pond area of proposed 2X300MW Thermal Power Plant at Jobra & Hamirpur in Raigarh (NSAX)**	2012-2013	D. Chakaravarty, B. Samanta,
32	JSPL	**Investigation of Geotechnical and environmental parameters for fly-ash dumps at JSPL Opencast mines (IGEP)**	2011-2012	D. Chakaravarty, B. Samanta
33	JPL	**Studies of Geo-Environmental Parameters in Fly-Ash Dumps at JPOCCM (SGEP)**	2010-cont.	D. Chakravarty, B. Samanta, B. S. Sastry,
34	SCCL	**Pressure-quantity Survey and Network Analysis at the GDK-8 & 8A Incline Integrated Circuit, RG-II, SCCL**	2006-2007	B. S. Sastry, B. Samanta
35	SCCL	**Scientific Study for introduction of air-cooling system at PVK No.5 Incline, Kothagudem area, SCCL**	2010-cont.	B. S. Sastry B. Samanta
36	East-West Mineral Sands Private Limited	**Resource Evaluation at Srikurmam Beach Sand Project**	2007-2008	B. S. Sastry B. Samanta
37.	**JPL**	**Stability Analysis of Ash-Dyke at 4 x 250 MW Jindal Power Plant, Tamnar, Raigarh**	**2012-13**	**D. Chakravarty, B. Samanta, B. S. Sastry**

14. List of Publications

PAPERS IN INTERNATIONAL JOURNALS

1) Thakur, M., Samanta, B., Chakravarty, D. (2016), A non-stationary spatial approach to disjunctive kriging in reserve estimation, Spatial Statistics, Vol.17, pp. 131-160

2) Sumanbabu, P., Samanta, B., Chakravarty, D. (2015), Design of a Feature Tuned ANN Model Based on Bulk Rock Derived Mineral spectra for Endmember Classification of a Hyperspectral image for an Iron ore Deposit, Int. Journal of Remote Sensing, Vol.36, No.8, pp. 2037-2062

3) . Krisna, O. B., .Maiti, J., Ray, P. K. Samanta, B., Mandal, S, S. Sarkar (2015), Measurement and modeling of job stress of EOT Crane Operator, Safety and Health at Work, pp. 1-10

4) Rajesh, R., Maiti, J.,Samanta, B., (2014), Application of cube model for biomechanical exposure assessment of combined MMH tasks in a manufacturing plant in India, IIE Transactions on Occupational Ergonomics and Human Factors, pp. 39-51

5) Yarrakula, K., Samanta, B., Deb, D. (2015), L- Moment and Composite Model approaches for Regional Flood Frequency Analysis, International Journal of Hydrology Science and Technology, Vol.5, pp.1-9

6) Sumanbabu, P., Samanta, B., Chakravarty, D., Dutta, D., (2015), Mixed spectral study of Hyperspectral data for abundance estimation of ores in Gua iron ore mines, India, CIM Magazine, Vol.6, No.4, pp. 208-218

7) Kunar B.M., Bhattacherjee A, Samanta B, and Mitra (2014), A Relationship of Individual and Work Related Factors with Obstructive type Lung Function Disorder of Underground Coal Miners: A Spiromerty Study, Journal of Geology and Mining Research, 57-63

8) Thakur, M., Samanta, B., Chakravarty, D (2014), Support and Information Effect Modeling for Recoverable Reserve Estimation of a Beach Sand Deposit in India Natural Resources Research, Vol. 23, pp. 231-245

9) Ghosh, D., Chakravary, D., Samanta, B. (2015), A Prototype Autonomous Mine Robot for Underground Mine mapping by., CIM Magazine, vol.5, No.3, pp.21-31

10) K. pal, D. Deb, H., Vardhan, H., M. Aruna, Samanta, B., (2011), Land- use Land-cover changes in East Singhbhum Mineralized Zone: A case study, Disaster Advances, Vol. 4, no. 4, pp. 5-10.

11) K. Yarrakula, D. Deb, B. Samanta,(2012), Comparative evaluation of Cartosat-1 and SRTM imageries for digital elevation modeling, Geo-spatial Information Science, pp. 1-8

12) *B. Samanta, K. V. Raj, A. Bhattacherjee, D. Chakravarty, (2013), Uncertainty* Based *Mine Production Scheduling* for Ore Grade ControlUsing Conditional Simulation and Multi Objective Genetic Algorithms, Mining Engineering, Vol. 65, No. 4, pp. 66-76

13) G. Samanta, B. Samanta, and D. Chakravarty (2011), Mine planning and design of Malanjkhand copper deposit, SME Transactions, Vol. 330, pp. 563-572.

14) Samanta, B. (2010), Radial basis function for ore grade estimation, Natural Resources Research, Vol. 12,. No.3, pp. 209–222

15) Samanta, B. and Bandopadhyay, S. (2009), Conditional Simulation of a Placer Gold Deposit Using Sequential Gaussian, Histogram-matching and Simulated Annealing Algorithm, Transactions of SME, v.326, pp.111-118.

16) Samanta, B. and Bandopadhyay, S. (2009), Construction of a RBF Network Using an Evolutionary Algorithm for Ore Grade Estimation in a Placer Gold Deposit, Computers & Geosciences, v.35, pp. 1592-1602.

17) Chatterjee, S., Bhattacherjee, A., Samanta, B., and Pal, S. K.(2009), Image-based quality monitoring system of limestone ore grades, Computers in Industry, vol. 61, no. 5, pp.391-408

18) Purusotham, T., Sastry, B.S., and Samanta, B. (2010), Estimation of Shock Loss Factors at Shaft Bottom Junction using Computational Fluid Dynamics and Scale Model Studies, CIM Magazine, pp. 130-139

19) Dutta, S., Bandopadhyay, S., Ganguli, R., and Samanta, B. (2009), Comparative Performance of Radial Basis Function Network and Support Vector Regression in an Automated Spatial Mapping of Natural Radioactivity, International Journal of Environmental Pollution Control and Management, vol. 1, no.2, pp.111-131

20) Chatterjee S, Bhattacherjee A, Samanta B, and Pal S K (2008), Rock type classification of an iron ore deposit using digital image analysis technique, International Journal of Mining and Mineral Engineering, v. 1, pp. 22-46.

21) Samanta, B., Kumar, A., Bhattacherjee, B. and Chatterjee, S. (2007), Open Pit Mine Design in Presence of Uncertainty Due to Ore Grade Modeling, Mineral Resources Engineering, v. 12, pp 241-257.

22) Mishra, D., Samanta, B., Dutta, S. and Bandopadhyay, S. (2007), Evaluation of ANN and Kriging for the Prediction of Arsenic in Bedrock Derived Stream Sediments Using Gold Concentration Data, International Journal of Surface Mining, Reclamation and Environment, v.21, pp. 282-294.

23) Chatterjee, S., Bandopadhyay, S., Ganguli, R., Bhattacherjee, A., Samanta, B., Pal. S. K. (2007), General regression neural network residual estimation for ore grade prediction of limestone deposit, Mining Technology, v. 116, pp. 89-99.

24) Chatterjee S, Bhattacherjee A, Samanta B and Pal S. K. (2006), Ore grade estimation of a limestone deposit in India using artificial neural network, Applied GIS, v. 2, pp. 2.1-2.20.

25) Dutta, S., Mishra, D., Ganguli, R., Samanta, B., and Bandopadhyay, S. (2006), Hybrid Ensemble Model of Kriging and Neural Network for Ore Grade Estimation,   International Journal of Surface Mining, Reclamation and Environment, v. 20, pp. 33-45.

26) Samanta, B., Bandopadhyay, S. and Ganguli, R (2006), Comparative Evaluation of Neural Network Learning Algorithms for Ore Grade Estimation, Mathematical Geology, v. 38, pp. 175-197.

27) Samanta, B., Bandopadhyay, S., Ganguli, R. and Dutta S (2005), A comparative study of the performance of single neural network vs. Adaboost algorithm based multiple neural networks for mineral resource estimation, Journal of the South African Institute of Mining and Metallurgy, v. 105, pp. 237-247.

28) Dutta, S., Ganguli, R., and Samanta, B., Dutta, S., Ganguli, R. and Samanta, B. (2005), Investigation of two Neural Network methods in an Automatic Mapping Exercise, Applied GIS, v. 1, pp. 20-1 to 20-19.

29) Samanta, B., Ganguli, R. and Bandopadhyay, S. (2005), Comparing the Predictive Performance of Neural Network Technique with Ordinary Kriging Technique in a Bauxite Deposit, Transactions Institute of Mining and Metallurgy, v. 114, pp. A1-A12.

30) Samanta, B. and Bhattacherjee, A. (2004), Use of Johnson Transformation for Constructing Control Chart for Nonnormal population in surface mining operations, Transactions of SME, v. 316, pp. 113-119.

31) Samanta, B. and Bhattacherjee, A.(2004), Problem of Nonnormality in Statistical Quality control, Journal of the South African Institute of Mining and Metallurgy, v.104, pp. 257-264.

32) Samanta, B., Bandopadhyay, S. and Ganguli R. (2004), Data segmentation and Genetic Algorithms for Sparse data division in Nome placer grade estimation using neural network and geostatistics, Exploration and Mining Geology, vol. 11, pp. 69-76.

33) Samanta, B., Bandopadhyay, S., Ganguli, R. and Dutta, S. (2004), Sparse Data Division Using Data Segmentation and Kohonen Network for Neural network and Geostatistical Ore Grade Modeling in Nome Offshore Placer Deposit, Natural Resources Research, Vol. 13, pp. 189-200.

34) Bhattacherjee, A. and Samanta, B. (2002), Practical Issues in Construction of Control Charts in Mining Applications, Journal of the South African Institute of Mining and Metallurgy, vol. 102, pp. 173-180.

35) Samanta, B.(2002), Multivariate Control Chart Using Principal Component Analysis and Time-Series Modeling: A Case Study, Transactions of the Institute of Mining and Metallurgy: Section A, Vol.111, pp. A149-A157.

36) Samanta, B. and Bhattacherjee, A. (2001), An Investigation of Quality Control Charts for Autocorrelated Data, Mineral Resources Engineering, Vol. 10, pp. 53-69.

37) Samanta, B. and Bhattacherjee, A. (1999), Statistical Quality Control: A Multivariate Approach, Mineral Resources Engineering, Vol. 8, pp. 227-238.

38) Yarrakula, K., Deb, D., and Samanta, B. (2010), Hydrodynamic Modeling of Subernarekha River and its Floodplain using Remote Sensing and GIS Techniques, Journal of scientific and industrial research, Vol.69, pp. 529-536

39) Samanta, B., Bandopadhyay, S. and Bhattacherjee, A. (2009), A Comparative Evaluation of Gaussian Markov Random Model based Simulation and Sequential Gausian Simulation for Orebody Modelling, Journal of Mines, Metals and Fuels, Vol. 57, pp. 8-22.

40) Chatterjee S, Bhattacherjee A, Samanta, B. and Pal, S. K. (2005),   Comparative Study of Principle Component Kriging and Ordinary Kriging in Ore Grade Estimation of a Limestone Deposit, Minetech, Vol 26, pp 29-35.

41) Samanta, B., and Bhattacherjee, A (2003), Conditional Simulation Technique as a Tool for Grade Forecasting: A Case Study, Journal of Mine, Metal and Fuels, Vol. 51, pp. 229-233.

42) Samanta, B., Bhattacherjee, A. and Adhikery, R (2002), An Investigation of Geostatistical Techniques for Orebody Modeling in a Bauxite Deposit, Minetech, Vol. 23, pp. 71-76.

43) Samanta, B. and Bhattacherjee, A (2001), An Investigation of Cokriging Technique in an Iron Ore Deposit for Estimation of Multivariate Quality Characteristics, Minetech, Vol. 22, pp. 21-33.

44) Samanta, B., Bhattacherjee, A., Ray, S. C. and Ray, P. K. (2000), A Statistical Approach for Evaluating the Impact of Blending, Journal of Mines, Metals and Fuels, Jan-Feb., 2000, pp. 23-27.

45) Samanta, B. and Bhattacherjee, A. (2000), An Application of Control Charts for Quality Control in a Bauxite Deposit, Minetech., Vol. 21, pp. 19-22.

46) Samanta, B. and Bhattacherjee, A. (1999), Determination of Rest Break Policy for Mining Operations: An ergonomic approach, Minetech, Vol. 20, pp. 31-36.

47) Samanta, B. and Bhattacherjee, A.(1998), Influence of Posture on Drilling Operations, Journal of Mines, Metals and Fuels, Vol. 46, pp. 186-191.

48) Samanta, B. and Bhattacherjee, A. (1998), A Model for Quantitative Assessment of Blending, Trans. of MGMI, Vol. 95, pp.59-71.

49) Samanta, B., Bhattacherjee, A., Ray, P. K. and Ray, S. C.(1996), Human Factors Application in Mining: A Case Study, Trans. of MGMI, Vol. 93, pp.105-120.

PAPERS IN CONFERENCE PROCEEDINGS

1) Dey, T. K., Manna, B, Chakravarty, D., Samanta, B., Misra, A. R. (2013), TG-tool: An InSAR processing software for measuring surface change using DInSAR technique," in International Expert Meet on Microwave Remote Sensing. IEEE GRSS Gujarat Chapter, 2013, pp. 33–35.

2) Dey, T. K., Manna, B, Chakravarty, D., Samanta, B., Misra, A. R, Samanta, B. (2014), ITG-Tool": A GUI Based Software for Interferometric SAR Processing for Monitoring Surface Deformation," in NISAR Science Workshop, SAC Ahmedabad, India, 2014, pp. 1–6.

3) Dey, T. K., Manna, B, Chakravarty, D., Misra, A. R, Samanta, B. (2015), Quantification and analysis of mining subsidence using a developed GUI based DInSAR processing tool, in NISAR Science Workshop, SAC Ahmedabad, India, 2015, pp. 1–6.

4) Thakur, M., Samanta, B., Chakravarty, D., (2015), Comparison between Disjunctive Kriginf and Multi-Gaussian Kriging to estimate the recoverable reserve for a beach sand deposit in India, presented at 37th APCOM, held at UAF, Alaska, 23-27 May, 2015, pp. 102-111

5) Chatterjee, S., Dutta, S., Bandopadhyay, S., Samanta, B., (2015), Support vector machines: an imerging technique for ore grade estimation, presented at 37th APCOM, held at UAF, Alaska, 23-27 May, 2015, pp. 826-836.

6) Ghosh, D. Chakravarty, D, and Samanta, B., (2013), Development of an autonomous Robot for underground mine mapping to improve mine safety, National Symposium on 'Present Technology and Safety Scenario in Mining and Allied Industries (PTSM)', India.

7) Babu, P.S., Samanta, B., Chakaravarty, D., Dutta.D and Jayaram, A (2013),Spectral Mixture Model and Sub pixel classification on the Hyperspectral image for targeting

the bauxite ore deposits, Panchpatmali, Orissa, India, Presented in India Geospatial Forum 2013, 22-24 January, Hyderabad, India

8) Kiran, Y., Deb, D. and Samanta, B. (2011), Flood Inundation mapping of Subernarekha River using High Resolution CARTOSET-I DEM, TMSMI, NIT, Rourkela, India,

9) Babu, P. S., Chakravarty, D., Samanta, B, Banerjee, P., Ghosh, D., and Jayram, A., Spectral characterization of iron mineralization using Hyperspectral imaging: A case study, TMSMI, NIT, Rourkela, India,

10) **Kiran Yarrakula**, D.Deb, B.Samanta Applications of Remote Sensing and Geographical Information System (GIS) in Assimilation of Environmental Data, National Symposium on Environment, IIT Kanpur, May 13-15, 2010

11) Kiran Yarrakula, D.Deb, B.Samanta, K. Pathak, K. Pal, Srivastav, Development of high resolution Digital Elevation Model (DEM) from CARTOSAT-1 imageries for water resources applications near mining sites, International Conference on Emerging Scenarios in Space Technology and Applications, Satyabhama University, Chennai, Nov 13 – 15, 2008

12) Kiran Yarrakula, D.Deb, B.Samanta, Kashinath Pal, Land use land cover changes and NDVI changes around Uranium Mining Sites, Indo – Korean joint International Symposium on Geo-science & Technology, IIT Kharagpur, Feb 12 – 14, 2008

13) Kiran, Y., Deb, D. and Samanta, B. (2009), Principle Component Analysis for the improvement of Land-use Land cover classification, International Conference on Food Security and Environmental Sustainability, held at IIT Kharagpur.

14) Kiran, Y., Deb, D. and Samanta, B. (2009), Flood Inundation Mapping of Subernarekha River Using High Resolution CARTOSAT-1 DEM, International Conf. on Hydrology and Watershed Management, held at JNTU, Hyderabad.

15) Kiran, Y., Deb, D. and Samanta, B. (2009), Flood Frequency Analysis of Subarnerekha River, International Conf. on Hydrology and Watershed Management, held at JNTU, Hyderabad.

16) Samanta, B., Devulapally, P., Bhattacherjee, A., and Kunar B. M. (2008), Work-related Musculo-skeletal Disorder Study on Drilling Operations in an Underground Coal Mine Through Human Factors Approach, Proceedings of EMMA-2008, held at BHU, pp. 497-506.

17) Samanta, B., Raj., K. V., and Bhattacherjee, A. (2008), Uncertainty Based Scheduling for Grade Control Using Conditional Simulation and Genetic Algorithms, 2nd Asian Mining Congress, held at Kolkatta, pp. 37-44.

18) Purushotham, T., Samanta, B. and Sastry, B. S. (2008), Application of CFD in Underground Environment, ETMAI, held at NIT, Rourkela, pp. 517-525.

19) Purushotham, T., Samanta, B. and Sastry, B. S. (2008), Investigation of Shock Losses in Mine Ventilation Ducts, GTEE-2008, held at IIT, Kharagpur, pp. 126-133.

20) Kunar, B. M., Shahid, M., Bhattacherjee, A., and Samanta, B., (2008), A Spirometry Study of Lung Disorder for Underground Coal Mines, GTEE-2008, held at IIT, Kharagpur, pp. 180-187.

21) Kiran, Y., Deb, D., Samanta, B., Pathak, K., Pal. K., Srivastav, K. (2008), Development of High Resolution DEM from CARTOSAT-1 Imageries for Water Resources Applications near Mining Sites, ESSTA-2008, held at Sathyabama univ., Chenai., pp. 137-143.

22) Dutta, S., Bandopadhyay, S. and Samanta, B. (2006), Support Vector Machines: An Emerging Technique for Ore Reserve Estimation, Proceedings of the Sixth International Symposium on Information Technology Applied to Mining, held at Peruvian Institute of Mining Engineers, Peru, (CD).

23) Samanta, B., Bhattacherjee, A. and Ganguli, R. (2005), A Genetic Algorithms Approach for Grade Control Planning in a Bauxite deposit **(Peer Reviewed)**, 32nd APCOM 2005, held at Arizona, USA, pp. 337-342.

24) Dutta, S, Ganguli, R. and Samanta, B. (2005), Comparative Evaluation of Radial Basis Functions and Kriging for Ore Grade Estimation **(Peer Reviewed)**, 32nd APCOM 2005, held at Arizona, USA, pp. 203-210.

25) Samanta, B., and Bandopadhyay, S. (2005), Neural networks and their issues for modeling geosciences data- TECMAC, held at NIT, Rourkela, pp. 200-214.

26) Shukla, S., Samanta, B., and Bandopadhyay, S. (2005), Goodnews Bay Platinum Grade Estimation Using Neural Network, aimm-2005, held at IIT, Kharagpur, pp. 87-91.

27) Dutta, S., Mishra, D., Ganguli, R. and Samanta, B. (2004), An Ensemble of Neural Network for Orebody Modeling in a Bauxite Deposit **(peered Reviewed),** CIT Conference, held at Bhubaneswar, pp. 15-21.

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