## LIST OF PUBLICATIONS

Chapters Published in Books:

Sl. No.	Author (s)	Title	Book Title	Editor-in-Chief	Publisher with ISBN/ISSN No.	Page No.
1.	<b>Ajit Kumar</b> , J. Das, K. Dasgupta	Performance Investigation of a Hydro- pneumatic type Accumulator used in a Hydrostatic Drive System of Off-road Vehicles	Fluid power networks: proceedings: 19th - 21th March 2018: 11th International Fluid Power Conference Vol.1	Hubertus Murrenhoff	RWTH Aachen University, DOI: 10.18154/RWTH- 2018-224355, ISBN:3-95886- 215-2, 978-3- 95886-215-9	Pages /Article No: 36- 49
2.	Ajit Kumar and Pramod Kumar Patel	Visualization of Stress, Strain and Deformation on Blade Assembly of a Dozer Machine, Comparison among ADI and Hardox: FEA	Introduction to Mechanical Engineering	Hongseok Choi, Deptt of Mechanical Engg, Clemson University, USA	Research India Publications ISBN: 978-81- 935729-7-9	113- 128
3.	Ajit Kumar and Srinivas Nandikanti	Necessity of Pre- Cleaning System for Hydraulic Aggregates in a Hydraulic Equipment Production Plant: A Case Study	Advanced Engineering Research and Applications	Hongseok Choi, Deptt of Mechanical Engg, Clemson University, USA	Research India Publications ISBN: 978-93- 86138-65-1	311- 328

## **Research Papers**

- 1. **Ajit Kumar**, K. Dasgupta and N. Kumar (2021), 'Modeling and Analysis of a Novel Priority Valve Controlled Cable Reeling Drum Drive of Load Haul Dump Vehicle', in *IEEE Transactions on Vehicular Technology*, Vol. 70 (7), pp. 6636-6646, doi: 10.1109/TVT.2021.3087541.
- 2. S. Rowduru, N. Kumar, **Ajit Kumar** (2020), 'A critical review on automation of steering mechanism of load haul dump machine', *Proceedings of the Institution of Mechanical Engineers*, *Part I: Journal of Systems and Control Engineering*, Vol. 234 (2), pp. 160-182.
- 3. **Ajit Kumar**, J. Das, K. Dasgupta (2019), 'Achieving constant speed of a hydrostatic drive using controlled operation of the pump and enhancing its energy efficiency', *ISA Transactions*, Elsevier, Vol. 90, pp. 189-201
- 4. Rakesh Kumar, Alok Vardhan, Dinkar B. Kishorilal and **Ajit Kumar** (2018), 'Reliability analysis of a hydraulic shovel used in open pit coal mines', *Journal of Mines, Metals and Fuels*; Vol. 66; No. 8, Aug 2018; pp. 472-477.
- 5. Alok Vardhan, **Ajit Kumar** and K. Dasgupta (2017), 'Effect of various parameters on the performance of the blasthole drilling', *Journal of Mines, Metals and Fuels*; Vol. 65; No. 2, Feb 2017; pp. 49-54.
- Ajit Kumar, J. Das, K. Dasgupta, M. K. Barnawal (2018), 'Effect of Hydraulic Accumulator on Pressure Surge of a Hydrostatic Transmission System', *Journal of the Institution of Engineers* (*India*): Series C-Springer Publications, Vol. 99 (2), pp. 169-174, doi: 10.1007/s40032-017-0351-4.
- 7. **Ajit Kumar**, J. Das, K. Dasgupta (2017), 'Analysis of Decay Characteristics of an Accumulator in an Open-Circuit Hydrostatic System with Pump Loading', *Proceedings of the Institution of Mechanical Engineers, Part I: Journal of Systems and Control Engineering*, Vol. 231; No. 4, Feb 2017; pp. 312-326.

- 8. **Ajit Kumar** (2016), 'Analysis of Dynamic Characteristics in Ore Communition:Revisited', *Special Publication of the Geological Society of India*, No. 04 (2016), Special Issue, pp. 105-110, doi: 10.17491/cgsi/2016/95902.
- Alok Vardhan, Yash Kumar, Ajit Kumar and K. Dasgupta (2016), 'Development of Dust Control Methodologies in Continuous Mining Operation', *Journal of Mines, Metals and Fuels*; Vol. 64; No. 11, Nov 2016; pp. 557-563.
- Ajit Kumar, Srinivas Nandikanti (2016), 'Analysis of Stress Distribution on the Bucket of a Dragline Machine', *Journal of Mines, Metals and Fuels*; Vol. 64; No. 5&6, May-June 2016; pp. 118-122
- 11. Shree Harsha R, **Ajit Kumar**, Abhishek Kumar (2016), 'Mathematical Modelling of a Hydro-Pneumatic Type Gas Accumulator', *Journal of Mines, Metals and Fuels*; Vol. 64; No. 5&6, May-June 2016; pp. 155-158.
- 12. **Ajit Kumar**, K. Dasgupta, J. Das (2016), 'Improving Efficiency of Hydrostatic Steering System Used In Off-Road Vehicles Using Accumulator: A Review', *Journal of Mines, Metals and Fuels*; Vol. 64; No. 5&6, May-June 2016; pp. 165-168.
- 13. Pramod Kr. Patel, **Ajit Kumar** (2016), 'Intensity Analysis and Structural Optimization on Multi-Shank Dozer Ripper: Visualization of Stress, Strain and Deformation through FEA', *Journal of Mines, Metals and Fuels*; Vol. 64; No. 5&6, May-June 2016; pp. 187-192.
- 14. Abhishek Kumar, **Ajit Kumar** (2016), Shree Harsha R, 'Operational Characteristics of a Fixed Displacement Hydraulic Pump: An Overview', *Journal of Mines, Metals and Fuels*; Vol. 64; No. 5&6, May-June 2016; pp. 161-164.
- 15. Akanksha Sinha, K. C. Jana, **Ajit Kumar** (2015), 'Implementation of Optical Fiber Technology in Power Transmission: A Step above Wireless Technology', *International Journal of Applied Engineering Research*, Vol. 10, No. 79 (2015), Special Issue, pp. 19-23, © (2015) Research India Publications.
- 16. Dilip Kumar, J. Das, **Ajit Kumar** (2015), 'Study on Electro-hydraulic Actuated Close Loop Controlled Excavator', *International journal of Applied Engineering Research*, Vol. 10, No. 69 (2015), Special Issue, pp. 103-107, ISSN 0973-4562, © (2015) Research India Publications.
- 17. **Ajit Kumar**, Alok Vardhan, Rakesh Kumar (2014), 'Necessity of GPS-Based Proximity Warning System in Mining Industry A tool to Prevent Mine Transport Accident', **Minetech**, ISSN: 0970-7204, Jan-March, 2014, vol. 35, No. 1, pp. 35-39.
- J. Das, Santosh Kr. Mishra, RamaShankar Paswan, Ajit Kumar, Sujit Kumar, R. Saha, S. Mookherjee (2016), 'Characterization and Tracking Control of a Nonlinear Electrohydraulic Valve-Cylinder System', *Journal of Process Mechanical Engineering*, Sage Publication, Vol. 230(5), pp. 371-384, doi: 10.1177/0954408914554021
- 19. Ramashanakar Paswan, J. Das, N. Kumar, **Ajit Kumar**, Santosh Kr. Mishra, Sujit kumar (2014), 'Performance analysis of directional control valve: an overview', *International journal of Applied Mechanics and Materials*, Vols. 592-594 (2014) pp 1983-1987, © (2014) Trans Tech Publications, Switzerland.
- 20. Ramashanakar Paswan , J. Das, N. Kumar, **Ajit Kumar**, Santosh Kr. Mishra, Sujit kumar (2014), 'Hydraulic circuit in damper: an overview', *International journal of Applied Mechanics and Materials*, Vols. 592-594 (2014) pp 2056-2060 ⊚ (2014) Trans Tech Publications, Switzerland.
- 21. J. Das, Sujit Kumar, Santosh. Kr. Mishra, **Ajit Kumar**, N. Kumar, Ramashankar Paswan (2014), 'Modern Advancement of Hydraulic Motor: A Review', *International journal of Applied Mechanics and Materials*, Vols. 592-594 (2014) pp 2179-2183 © (2014) Trans Tech Publications, Switzerland.
- 22. J. Das, Sujit Kumar, Santosh. Kr. Mishra, **Ajit Kumar**, N. Kumar, Ramashankar Paswan (2014), 'Study of energy saving system for hydrostatic drive- A Review', *International journal of Applied*

- *Mechanics and Materials*, Vols. 592-594 (2014) pp 2210-2214 © (2014) Trans Tech Publications, Switzerland.
- 23. Ramashanakar Paswan, J.Das, N.Kumar, **Ajit Kumar**, Santosh Kr. Mishra, Sujit kumar (2014), 'Simulation study on different energy efficient hydraulic system: an Overview', *International journal of Applied Mechanics and Materials*, Vols. 592-594 (2014) pp 2234-2238 © (2014) Trans Tech Publications, Switzerland.
- 24. J. Das, Santosh K. Mishra, **Ajit Kumar**, N. Kumar, Sujit K, R. Paswan (2014), 'Study of energy recycling in electro-hydraulic system', *International journal of Applied Mechanics and Materials*, Vols. 592-594 (2014) pp 2244-2248 © (2014) Trans Tech Publications, Switzerland.
- 25. J. Das, Santosh K. Mishra, **Ajit Kumar**, N. Kumar, Sujit. K, R. Paswan (2014), 'Study on Hybridization of Hydraulic System used in Heavy Machinery', *International journal of Applied Mechanics and Materials*, Vols. 592-594 (2014) pp 2249-2253 © (2014) Trans Tech Publications, Switzerland.
- 26. **Ajit Kumar**, N. Kumar, K. Dasgupta, J. Das and Raj Kumar (2014), 'Analysis of Steady State Performance of an Open Loop Drive of a Hydraulic Motor used in Hydrostatic Transmission System', *International Journal of Current Engineering and Technology*, E-ISSN 2277 4106, P-ISSN 2347 5161, Special Issue-2, (February 2014), pp. 407-412.
- 27. M. K. Barnwal, G. K. Gangwar, N. Kumar, A. Kumar, J. Das (2013), 'Steady State Performance Analysis of Hydrostatic Transmission System (HST)', *International Journal of Mechanical and Production Engineering*, ISSN: 2320-2092, Volume-1, Issue-6, Dec-2013, pp. 48-51.
- 28. **Ajit Kumar**, J. Das, Santosh Kr. Mishra (2013), 'Performance Investigation of a Proportional Valve Controlled Hydraulic Motor used in Hydrostatic Transmission System', *International Journal of Mechanical and Production Engineering*, ISSN: 2320-2092, Volume- 1, Issue- 6, Dec-2013, pp. 39-42.

## Conference Papers

- 1. Shatrughan Thakur, **Ajit Kumar**, Shubhyanshu Singh, 'Performance study of different type of man riding systems used in underground mines: A Case Study', *International conference on Recent Developments on Materials, Reliability, Safety and Environmental issues (IMRSE)* 2021, NIT Jalandhar, Punjab, June 25 27 2021.
- 2. Shubhyanshu Singh, **Ajit Kumar**, Shatrughan Thakur, 'Simulation analysis on energy regenerating in the swing drive system of a hydraulic excavator machine', *International conference on Recent Developments on Materials, Reliability, Safety and Environmental issues* (*IMRSE*) 2021, NIT Jalandhar, Punjab, June 25 27 2021.
- 3. **Ajit Kumar**, K. Dasgupta, J. Das, 'Performance Investigation of a Hydro-pneumatic type Accumulator used in a Hydrostatic Drive System of Off-road Vehicles', *11th International Fluid Power Conference (IFK 2018)*, RWTH Aachen University, Aachen, Germany, March 19 21' 2018.
- SreeHarsha R., Ajit Kumar, Abhishek Kumar, Premsagar P., 'Simulation and Performance Analysis of Potential Energy Regeneration in Hydraulic Systems', 3<sup>rd</sup> National Conference on Mining Equipment: New Technologies, Challenges and Applications (MENTCA 2018), Deptt. of Mining Machinery Engineering, ISM Dhanbad, India, February 9 -10, pp. 235-240.
- 5. **Ajit Kumar**, Gajendra Kumar, K. Dasgupta, J. Das, 'Simulation Analysis of Hydraulic Steering System used in Off-Road Vehicles using MATLAB/Simulation® Environment', 3<sup>rd</sup> National Conference on Mining Equipment: New Technologies, Challenges and Applications (MENTCA 2018), Deptt. of Mining Machinery Engineering, ISM Dhanbad, India, February 9 -10, pp. 288-293.

- 6. R. Shreeharsha, N. Kumar, **Ajit Kumar**, D. B. Naik, 'Impact of used Hydraulic Fluids on Environment', 33rd National Convention of Environmental Engineers & National Seminar on Status of Technological Advancement to meet the Environmental norms for Indian Mining and Allied Industries, DGMS Dhanbad, India, August 24 25, 2017.
- 7. Abhishek Kumar, **Ajit Kumar**, R. Shreeharsha, 'Optimization of Surface Roughness using Taguchi Method in Milling of Aluminium Alloy', *National Conference on Recent Advances in Science and Engineering (RASE 2016)*, ISM Dhanbad, India, March 28 29, 2016.
- 8. Abhishek Kumar, **Ajit Kumar**, R. Shreeharsha, 'Prediction of Remaining Useful Life of Lubricant used in Heavy Earth Moving Machineries', *National Conference on Recent Advances in Science and Engineering (RASE 2016)*, ISM Dhanbad, India, March 28 29, 2016.
- 9. Alok Vardhan, Ajit Kumar Pandey, N. Kumar, **Ajit Kumar**, 'Capacity Estimation of a Belt Conveyor System using Conventional Approach', *All India Seminar on Advances in Mine Transport System organized by The Institution of Engineers (India), Dhanbad Local Centre under the aegis of Mining Engineering Division, IEI in association with DGMS, BCCL Community Hall, Koyla Nagar, Dhanbad, India, January 20 -21' 2016.*
- Ajit Kumar, Srinivas Nandikanti, 'Analysis of Stress Distribution on the Bucket of a Dragline Machine', 2<sup>nd</sup> National Conference on Mining Equipment: New Technologies, Challenges and Applications (MENTCA 2015), Deptt. of Mining Machinery Engineering, ISM Dhanbad, India, October 9 -10, pp. 43-47.
- 11. Pramod Kr. Patel, **Ajit Kumar**, Sharmila Patel, 'Engine Selection for Dozer, Applicable in Indian Open-cast Mines', 2<sup>nd</sup> National Conference on Mining Equipment: New Technologies, Challenges and Applications (MENTCA 2015), Deptt. of Mining Machinery Engineering, ISM Dhanbad, India, October 9 -10, pp. 48-53.
- 12. Shree Harsha R, **Ajit Kumar**, Abhishek Kumar, 'Mathematical Modelling of a Hydro-Pneumatic Type Gas Accumulator', 2<sup>nd</sup> National Conference on Mining Equipment: New Technologies, Challenges and Applications (MENTCA 2015), Deptt. of Mining Machinery Engineering, ISM Dhanbad, India, October 9 -10, pp. 131-136.
- 13. **Ajit Kumar**, K. Dasgupta, J. Das, 'Improving Efficiency of Hydrostatic Steering System Used In Off-Road Vehicles Using Accumulator: A Review', 2<sup>nd</sup> National Conference on Mining Equipment: New Technologies, Challenges and Applications (MENTCA 2015), Deptt. of Mining Machinery Engineering, ISM Dhanbad, India, October 9 -10, pp. 145-149.
- 14. Pramod Kr. Patel, **Ajit Kumar**, 'Intensity Analysis and Structural Optimization on Multi-Shank Dozer Ripper: Visualization of Stress, Strain and Deformation through FEA', 2<sup>nd</sup> National Conference on Mining Equipment: New Technologies, Challenges and Applications (MENTCA 2015), Deptt. of Mining Machinery Engineering, ISM Dhanbad, India, October 9 -10, pp. 202-207.
- 15. Abhishek Kumar, **Ajit Kumar**, Shree Harsha R, 'Operational Characteristics of a Fixed Displacement Hydraulic Pump: An Overview', 2<sup>nd</sup> National Conference on Mining Equipment: New Technologies, Challenges and Applications (MENTCA 2015), Deptt. of Mining Machinery Engineering, ISM Dhanbad, India, October 9 -10, pp. 154-158.
- 16. **Ajit Kumar**, Abhishek Kr Chaoudhary, Shikhar Shukla, Shrey Kr. Singh, 'Design Analysis of Articulated Steering System used in Off-Road Vehicles', 2<sup>nd</sup> National Conference on Mining Equipment: New Technologies, Challenges and Applications (MENTCA 2015), Deptt. of Mining Machinery Engineering, ISM Dhanbad, India, October 9 -10, pp. 245-247.
- 17. Dilip Kumar, J. Das, **Ajit Kumar**, 'Study on Electro-hydraulic Actuated Close Loop Controlled Excavator', *Proceedings of the International Conference on Computing Paradigms (ICCP 2015)*, Don Bosco College, Guezou Nagar Yelagiri Hills, Vellore District, India, July 24 -25, 2015.
- 18. Amritanshu Raushan, **Ajit Kumar**, Ahmad Asadullah and Yash Kumar, 'Analysis of VAR System by using Exhaust Gas of IC Engine as a Heat Source', *Proceedings of the 1st National*

- Conference on Advances in Thermal Engineering (AITE 2014), ISM, Dhanbad, December 19 -20, 2014, pp. 270-275.
- 19. Ayush Pratap Singh, Anand Satyam, Alok Vardhan, Nirbhay Kumar Sinha and **Ajit Kumar**, 'Effective Utilisation of Thorium in Indian Nuclear Industry Reducing the Usage of Limited Uranium Resources', *Proceedings of the 1<sup>st</sup> National Conference on Advances in Thermal Engineering (AITE 2014)*, ISM, Dhanbad, December 19 -20, 2014, pp. 207-211.
- 20. Alok Vardhan, Anand Satyam, Ayush Pratap Singh, Rakesh Kumar, Ajay Kumar and Ajit Kumar, 'The Current Scenario of Non-conventional Energy Resources in India', Proceedings of the 1<sup>st</sup> National Conference on Advances in Thermal Engineering (AITE 2014), ISM, Dhanbad, December 19 -20, 2014, pp. 155-160.
- 21. Amritanshu Raushan, Ahmad Asadullah, Ajit Kumar, Yash Kumar and Pawan Kumar, 'Advancement in Thermal Power Plant as Super Critical Technology', Proceedings of the 1<sup>st</sup> National Conference on Advances in Thermal Engineering (AITE 2014), ISM, Dhanbad, December 19 -20, 2014, pp. 197-203.
- 22. Md. Muaz Hyder and **Ajit Kumar**, 'Overview and Future Prospects of Nuclear Power Plants in India', *Proceedings of the 1st National Conference on Advances in Thermal Engineering (AITE 2014)*, ISM, Dhanbad, December 19 -20, 2014, pp. 191-196.
- 23. **Ajit Kumar** and Ankur Verma, 'Overview and Development of Non-conventional Energy Resources in India', *Proceedings of the 1st National Conference on Advances in Thermal Engineering (AITE 2014)*, ISM, Dhanbad, December 19 -20, 2014, pp. 149-154.
- 24. M. K. Barnwal, N. Kumar, **Ajit Kumar**, J. Das, 'Effect of Hydraulic Accumulator on the System Parameters of an Open Loop Transmission System', *5th International & 26th All India Manufacturing Technology, Design and Research Conference (AIMTDR 2014)*, IIT Guwahati, Assam, India, December 12 -14, pp. 304(1)-304(5).
- 25. Alok Vardhan, Anand Satyam, N. Kumar and **Ajit Kumar**, 'Hydrostatic Transmission System: Overview and Literature Review', 47th Engineer's Day along with a deliberation of lecture on Making Indian Engineering World Class 2014, Institution of Engineers (IEI) Dhanbad Local Chapter in association with Indian School of Mines, Dhanbad, India, September 15, 2014, pp. 15-20.
- 26. Nirbhay Kumar Sinha, Rakesh Kumar, Ayush Pratap Singh, N. Kumar and **Ajit Kumar**, 'A Review on Fuzzy Logic Control of Hydrostatic Transmission System', 47th Engineer's Day along with a deliberation of lecture on Making Indian Engineering World Class 2014, Institution of Engineers (IEI) Dhanbad Local Chapter in association with Indian School of Mines, Dhanbad, India, September 15, 2014, pp. 21-27.
- 27. **Ajit Kumar**, Alok Vardhan, Ayush Pratap Singh, Rakesh Kumar, 'Design Methodology and Processes for Dust control of Underground Coal Mining Machineries', *1st International Conference on Contemporary Issues in Engineering & Technology (ICCIET) 2014*, Merchant Engineering College and Sardar Patel Institute of Technology, Gujarat, India, March 19-21, 2014, pp. 144, ISBN: 978-81929261-0-0.
- 28. Ajit Kumar, N. Kumar, K. Dasgupta, J. Das, Raj Kumar, 'Analysis of Steady State Performance of a Open Loop Drive of a Hydraulic Motor used in Hydrostatic Transmission System', Proceedings of the International Conference on Advances in Mechanical Sciences (ICAMS) 2014, Departments of Mechanical, Aeronautical and Civil Engineering, Vardhaman College Of Engineering, January 9-11, 2014, pp. 456-464.
- 29. **Ajit Kumar**, Akanksha Sinha, 'Minimizing the Effect of Pressure Rise on Hydraulic System Caused due to Water Hammer by the use of Hydraulic Accumulator', 40<sup>th</sup> National Conference on Fluid Mechanics and Fluid Power (NCFMFP) 2013, Deptt. of Civil Engineering, NIT Hamirpur, India, December 12 -14.

- 30. **Ajit Kumar**, Anand Satyam, Shashank Ranjan, 'Impact on Ground Water Quality owing to Open Cast Coal Mining & Reclamation', *National Seminar on Recent Approaches to Water Resource Management (RAWRM) 2013*, Department of Environmental Science & Engineering, Indian School of Mines, Dhanbad, December 9 -10, 2013.
- 31. **Ajit Kumar**, Prakash Kumar, Nagendra Kumar, 'Performance Improvement of Dragline Machine by using Tools for Efficiency Analysis', *National Seminar on Dragline Mining: Prospects & Challenges*, 2013, NCL, Singrauli under the aegis of Indian School of Mines Alumni Association (ISMAA) Singrauli Chapter, December 6-8, 2013.
- 32. **Ajit Kumar**, Anand Satyam, 'Analysis of Resistive Force Formation against the Bucket Action of a Dragline Machine', *National Seminar on Dragline Mining: Prospects & Challenges*, 2013, NCL, Singrauli under the aegis of Indian School of Mines Alumni Association (ISMAA) Singrauli Chapter, December 6-8, 2013.
- 33. **Ajit Kumar**, J. Das, Santosh Kr. Mishra, 'Performance Investigation of a Proportional Valve Controlled Hydraulic Motor used in Hydrostatic Transmission System', *Proceedings of 7<sup>th</sup> International Conference on Electrical, Electronics, Computer Science and Mechanical Engineering (ICEECSME) 2013, Institute of Research and Journals, Pune, India, December 1, 2013, ISBN: 978-93-82702-43-6, pp. 28-31.*
- 34. **Ajit Kumar,** 'Analysis of Dynamic Characteristics in Ore Crushing Plants', *Annual General Meeting (AGM) of the Geological Society of India and International Conference on Future Challenges in Earth Sciences for Energy and Mineral Resources (ESEMR) 2013' Department of Applied Geology, Indian School of Mines, Dhanbad, India, November 14-16, 2013.*
- 35. **Ajit Kumar**, Akanksha Sinha, Brajesh Kumar, Shashank Ranjan, 'Optimised Solution to Mining Problems: Laser Technology', *National Conference on Advances in Lasers And Spectroscopy* (ALS) 2012, Deptt. of Applied Physics, Indian School of Mines, Dhanbad, November 1-3, 2012.
- 36. **Ajit Kumar**, Akanksha Sinha, 'Nucleur Fuel Mining Channelling the Strong Force', National Seminar on Indian Nuclear Power Programme: Challenges and Opportunities (INCO) 2012, Deptt. of Mechanical Engineering, BIT Sindri, India.
- 37. Akanksha Sinha, **Ajit Kumar**, 'Waste Management of Nuclear Fuels', National Seminar on Indian Nuclear Power Programme: Challenges and Opportunities (INCO) 2012, Deptt. of Mechanical Engineering, BIT Sindri, India.
- 38. **Ajit Kumar**, Mayukh Sarkar, 'Watershed Management: Focus on Mining Impacts', *National Conference on Sustainable Development of Groundwater Resources in Industrial Regions* (SDGRIR) 2012, Deptt. of Environmental Science and Engineering, Centre of Mining Environment, Indian School of Mines, Dhanbad, March 22-23, 2012, pp. 65-70.
- 39. Ajit Kumar, Mayukh Sarkar, Subrata Kr. Ghosh, Akanksha Sinha, 'Role of database management for maintenance of heavy mining equipment used in opencast mines', National Conference on Emerging Research Paradigms in Business Management (NCERPBM) 2012, Deptt. of Management Studies, George college of management, Kolkata in collaboration with School of Management and Sciences, West Bengal University of Technology, Kolkata, India, March 3, 2012.
- 40. **Ajit Kumar**, Raj Kumar, 'Performance Analysis of a hydraulic system using accumulator', *National Seminar on Mining Equipment: New Technologies, Challenges and Applications* (*MENTCA*) 2012, Deptt. of Mechanical Engineering and Mining Machinery Engineering, Indian School of Mines, Dhanbad, India, January 19-21, 2012, pp. 197-200.
- 41. **Ajit Kumar**, Muhammad Danish, 'Evolution of blast free mining & Inpit crushing- A state of art technology for eco-friendly mining', 7<sup>th</sup> Convention of Indian Geological Congress and International Conference on 'New Paradigms of Exploration and Sustainable Mineral Development: Vision 2050 (NPESMD) 2011, Deptt. of Applied Geology, Indian School of Mines, Dhanbad, India, November 10-12, 2011.

42. **Ajit Kumar**, Sayantan Chattopadhyay, 'Innovation and creativity as instructional foci for successful management in times of high environmental instability', *National Seminar on Innovation and Creativity for Business Excellence (ICBE) 2011*, Deptt. of Management Studies, Indian School of Mines, Dhanbad, India, February 17-18, 2011.

## > Articles Published in Magazines

- 1. Technical paper published in National Magazine MASTER BUILDER'S of June issue, Vol.13, Issue 6, June-2011, titled "Desideration of gradation of RAP for recycling".
- 2. Technical paper published in a construction and engineering magazine for projects "PROJECT VENDOR" of July issue, Vol. 7, Issue 8, July-2011, titled "Evolution of Blast Free Mining and Inpit Crushing- The state of art technology for eco-friendly mining".