

## **Refereed Journal**

| No. | Full Name of Author                                                           | Title of Paper                                                                      | Name of the Journal                                 | Year of Publication     |
|-----|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------|-------------------------|
| 1.  | A.K. Mukherjee, R.K. Dutta and P.V.T. Rao                                     | Development of a mathematical model for prediction of washery Performance           | <i>Coal Preparation.</i>                            | 22, 109-122, 2002.      |
| 2.  | A.K. Mukherjee and S. Chandra                                                 | A robust statistical method to evaluate unit operation in coal washery              | <i>International Journal of Mineral Processing.</i> | 66, 145-162, 2002.      |
| 3.  | A.K. Mukherjee and Soni                                                       | Mathematical model for prediction of cone crusher performance                       | <i>Tata Search</i>                                  | 81-87, 2002             |
| 4   | A.K. Mukherjee, R. Sripriya, P.V.T. Rao and P. Das                            | Effect of increase in feed inlet pressure on feed rate of dense media cyclone       | <i>International Journal of Mineral Processing</i>  | 69, 259-274, 2003       |
| 5.  | A.K. Mukherjee, P.K. Banerjee, A.K. Bhatnagar, A. Dutta and S. Prasad         | Strategy to improve fine clean coal yield at West Bokaro                            | <i>Tata Search</i>                                  | 57-66. 2003             |
| 6   | P.K. Banerjee, A.K. Gupta, A.K. Mukherjee, P. Das, N.P. Singh and A.D. Baijal | Improvement of flotation performance at Bhelatand coal washery                      | <i>Tata Search</i>                                  | 9-25, 2004              |
| 7   | A.K. Mukherjee and B.K. Mishra                                                | Study of particle separation by fluidization                                        | <i>Trans. Of the Indian Institute of Metals</i>     | 57(5), 2004             |
| 8.  | A.K. Mukherjee, V.K. Dwivedi and B.K. Mishra.                                 | Analysis of a laboratory jigging system for improved performance.                   | <i>Minerals Engineering</i>                         | 18, 1037 – 1044, 2005   |
| 9.  | A.K. Mukherjee, B.K. Mishra and S.P. Mehrotra                                 | Two different modelling strategies for predicting jig bed stratification            | <i>Tata Search</i>                                  | 39 – 44, 2005           |
| 10. | M. China, R. Sripriya, S.K. Rai, A.K. Mukherjee, S.K. Sinha and S. Verma      | Performance of Noamundi iron ore processing plant: A critical evaluation            | <i>Tata Search</i>                                  | 79 – 82, 2006           |
| 11. | A.K. Mukherjee, B.K. Mishra                                                   | <i>An integral assessment of the role of critical process parameters on jigging</i> | <i>International Journal of Mineral Processing</i>  | 80 (3), 187 – 200, 2006 |
| 12. | A.K. Mukherjee, D. Bhattacharjee and B.K. Mishra                              | Role of water velocity for efficient jigging of iron ore                            | <i>Minerals Engineering</i>                         | 19, 952 – 959, 2006     |

13. **A.K. Mukherjee**, P. Gupta, S. K. Sit, M.C. Thomas and H. Jha Role of feed characteristics in jigging plant optimisation – A case study *Tata Search* 73 – 78, 2007
14. S.K. Rai, **A.K. Mukherjee**, P.K. Banerjee and M.C. Thomas Beneficiation of Noamundi iron ore fines – A case study for alumina reduction *Tata Search* 79 -82, 2007
15. P. K. Banerjee, Ashiwani Kumar Gupta, **A. K. Mukherjee**, P. Das, N. P. Singh, RS Singh Optimisation of reagents distribution down a coal flotation bank to improve the recovery of coarser particles *Coal Preparation* 27, 39 – 56, 2007.
16. **A.K. Mukherjee**, P. Gupta, S.K. Sit, M.C. Thomas, H. Jha, B.K. Mishra Role of feed characteristics in jigging plant optimisation – A case study *Australasian Institute of Mining and Metallurgy Publication Series, pp* 353 – 360.
17. **A.K. Mukherjee**, B.K. Mishra *Experimental and simulation studies on the role of fluid velocity during particle separation in a liquid-solid fluidized bed* *International journal of Mineral processing* 83, 211 -221, 2007
18. **A.K. Mukherjee**, P. Gupta, S.K. Sit, M.C. Thomas, B. K. Mishra Method to evaluate the role of feed characteristics in iron ore beneficiation *Minerals & Metallurgical Processing* 25(1), 25 – 31, 2008.
19. **A.K. Mukherjee**, B.K. Mishra, Ran Vijay Kumar. Application of Liquid/solid fluidization in beneficiation of fines *International Journal of Mineral Processing* 92 (2009) 67 - 73
20. **A.K. Mukherjee** A new method for evaluation of gravity separation processes *Mineral Processing and Extractive Metallurgy Review* 30: 191 – 210, 2009
21. **A.K. Mukherjee** and Abhishek Kumar Liquid/Solid fluidization its role and limitation in fine beneficiation – A review *Mineral Processing and Extractive Metallurgy Review* 30: 280 – 306, 2009
22. Atanu Banerjee and **A.K. Mukherjee** Characterisation of typical Indian iron ore slime through quantitative mineralogy to evaluate beneficiation prospect. *ISIJ International* 51, 1393-1395, 2011
23. John Samuel Thella, **Asim Kumar Mukherjee**, N. Gurulaxmi Srikakulapu Processing of high alumina iron ore slimes using classification and flotation *Powder Technology* 217, 418-426, 2012
24. A. Banerjee and **A.K. Mukherjee** Method to establish theoretical yield-grade relation for Indian iron ore slime through quantitative mineralogy *Minerals & Metallurgical Processing* 29(3), 144-147, 2012
25. **A.K. Mukherjee** and S.N. Gurulaxmi Float-sink apparatus and its use in the mineral industry *Mineral Processing & Extractive Metall. Rev.* 34, 130-138, 2013

26. D. Makhija, **A.K. Mukherjee**, T.K. Ghosh Pre-concentration feasibility of gravity and magnetic techniques for Banded Hematite Jasper. *International Journal of Mining Engineering and Mineral Processing.* 2(1), 8 – 15, 2013.
- 27.. **A.K. Mukherjee**, J.S. Thella, D. Makhija, A.S. Patra, M. Manna and, T.K. Ghosh Process to recover iron values from High-Alumina Indian Iron Ore Slimes – a bench scale study. *Mineral Processing & Extractive Metall. Rev.* 36, 39 – 44, 2014
28. A.S. Patra, R. Tiwary, P. Dixit, S. Singh and **A.K. Mukherjee** Investigation on collector performance in the presence of dispersant in the reverse flotation of iron ore slimes. *Tata Search* 45 – 48, 2014
29. R. Tiwari, P. Dixit, A.S. Patra, **A.K. Mukherjee**, P.K. Banerjee Effect of process parameters on the solids concentration of stub cyclone underflow vis-à-vis degree of thickening *Tata Search* 39 – 44, 2014
30. P. Dixit, R. Tiwari, **A.K. Mukherjee**, P.K. Banerjee. Application of response surface methodology for modelling and optimization of spiral separator for processing of iron ore slime. *Powder Technology* 105-112, 275, 2015
31. D. Makhija, A.S. Patra, **A.K. Mukherjee** Statistical analysis of the role of flotation frother and its optimization for selective recovery of iron minerals *Journal of ore dressing* 16(31), 24, 2014
32. R.Tiwari, P. Dixit and **A.K. Mukherjee** Beneficiation of ultrafine iron ore slime using fine mineral spiral concentrator *Tata Search* 53 – 57, 2015
33. D. Makhija, and **A.K. Mukherjee** Effect of undersize misplacement on product size distribution of Bond's ball mill test *Minerals Processing and Extractive Metallurgy* 125(2), 117 – 124, 2016
34. A.S. Patra, D. Makhija, **A.K. Mukherjee**, R. Tiwari, C.R. Sahoo, B.D. Mohanty Improved dewatering of iron ore fines by the use of surfactants. *Powder Technology* 287, 43 – 50, 2016
35. V. Singh, R. Venugopal, V.K. Saxena & **A.K. Mukherjee** Study of the effect of ultrasonic treatment on minerals materials of different morphologies *Minerals & Metallurgical Processing* 33, 2, 88 – 96, 2016
- 38.. D. Makhija, R.K. Rath, K. Chakravarty, A.S. Phosphorus partitioning and recovery of low-phosphorus *International Journal of Minerals, Metallurgy and* 23(7), 751 -759, 2016

- Patra, **A.K. Mukherjee**, A.K. Dubey iron-rich compounds through physical separation of Linz-Danwitz slag *Materials*.
- 39 D. Makhija, **A.K. Mukherjee**, T.K. Ghosh Pre-concentration feasibility of gravity and magnetic techniques for banded hematite jasper. *Int. Journal of Mining Engineering and Mineral Processing* 2(1), 8 - 5, 2013
39. D. Makhija and **A.K. Mukherjee** Effect of undersize misplacement on product size distribution of Bond's ball mill test. *Tata Search* 29 - 34, 2017
40. D. Makhija, P. Dixit, **A.K. Mukherjee**. Recovery of blast furnace grade iron ore concentrate from iron ore rejects. *Metallurgical Research & Technology* 114(2), 215, 2017
41. P. Kopparthi, R. Singh, D. Nag & **A.K. Mukherjee** Vitrinite maceral separation using column flotation *International Journal of Coal Preparation & Utilization*, 38(1), 180 - 191. 2018
42. A.S. Patra, N.V. Rao Nulakani, Y. Pavan Kumar, V. Subramanian, J. Dash, **A.K. Mukherjee** Design synthesis of novel polyamine collector to recover iron values from iron ore slimes. *Powder Technology*, 325, 180 - 191, 2018
43. G. Chalavadi, **A.K. Mukherjee**, Ranjit Singh, Ratnakar Singh, R.K. Rath, **A.K. Mukherjee** Development of dry beneficiation flowsheet for fine coking coal *International Journal of Coal Processing & Utilization*, 1 -14, .2018
44. Soni Jaiswal, Rashmi Singh, Veerendra Singh, **A.K. Mukherjee** A study of the effect of thermal shocks on liberation characteristics of high coal ash particles. *Fuel*, 233, 215 - 223, 2018
45. Prasad Kopparthi, S. Balamurugan, and **A.K. Mukherjee** Effect of ultrasonic pre-treatment time on coal flotation *Int. journal of Coal Preparation and Utilization* 1 - 17, 2017
46. P. Dixit, D. Makhija, **A.K. Mukherjee**, V. Singh, A. Bhatnagar, R.K. Rath Characterisation and beneficiation of dry iron ore processing plant rejects fines to produce sinter/pellet grade iron ore concentrate. *Mining, Metallurgy & Exploration* 36(2), 451 - 462, 2019
- 47 Prasad Kopparthi, D. Sachinraj., T. Gouri Charan., **A.K. Mukherjee**. Optimisation of surfactant aided coarse coal dewatering process in a pilot scale centrifuge *Powder Technology*, 349, 12 - 20, 2019
- 48 Makhija, D., Rath, R.K., **Mukherjee, A. K.,** Application of enhanced gravity technique for separation of iron phase from LD slag. *Metallurgical Research Technology* 116 (3), 303, 2019

|     |                                                                                     |                                                                                                                                                                        |                                                            |                        |
|-----|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|------------------------|
| 49  | Prasad Kopparthi, A. Awasthi., Sachinraj. D., <b>A.K. Mukherjee.</b>                | Beneficiation of coal fines using the Reflux classifier.                                                                                                               | <i>Minerals Engineering,</i>                               | 136, 110-119, 2019     |
| 50  | A.S. Patra, A. Basu, A. Biswas, A. Das. S.J. Anzoom., <b>A.K. Mukherjee</b>         | Synergistic effect of polar group containing collectors and synthesized frother of flotation performance of oxidized coal.                                             | <i>Int. Journal of Coal Preparation &amp; Utilization.</i> | 41(5), 307 - 320       |
| 51. | A. Dubey, A.S. Patra, A.N. Sarkar, A.Basu, S.K. Tripathy, <b>A.K. Mukherjee</b>     | Synthesis of Co-polymeric system and its flocculation performance for iron ore tailings.                                                                               | <i>Minerals Engineering</i>                                | 165, 106848, 2021      |
| 52. | D. Sachinraj, P. Kopparthi, P. Samanta, <b>A.K. Mukherjee</b>                       | Optimisation of Column flotation for fine coal using Taguchi Method                                                                                                    | <i>Transactions of the Indian Institute of Metals.</i>     | 1-13, 2022             |
| 53. | M.N. Azad, A.S. Patra, D. Sachinraj, P. Samanta, <b>A.K. Mukherjee.</b>             | New Process for recovery of ultrafine coal by Pre-treatment with surfactant.                                                                                           | <i>Mining, metallurgy, &amp; Exploration</i>               | 38(6), 2517-2526, 2021 |
| 54. | N. Nirmalkar, N. Dutta, <b>A.K. Mukherjee</b> , G. Boczkaj, P. Koppathi             | Novel strategies to enhance hydro-dynamic cavitation in a circular venturi using RANS numerical simulation.                                                            |                                                            | 2021                   |
| 55  | N.G. Srikakulapu, S.S. Cheela, V.K. Bari, <b>A.K. Mukherjee</b> , A.K. Bhatnagar.   | Effect of polymer flow aids on LD iron ore flowability.                                                                                                                | <i>Powder Technology, 377, 523 - 533</i>                   | 2021                   |
| 56. | B. Saha, A.S. Patra, <b>A.K. Mukherjee</b> & I Paul                                 | Interaction and thermal stability of Carboxymethyl cellulose on $\alpha$ - Fe <sub>2</sub> O <sub>3</sub> (001) surface: Reax-FF molecular dynamics simulations study. | <i>Molecular Graphics and Modelling, 102, 107787</i>       | 2021                   |
| 57. | A. Dubey, A.S. Patra, A.N. Sarkar, A. Basu, S.K. Tripathy & <b>A. K. Mukherjee.</b> | Synthesis of a Co-polymeric system and its flocculation performance for iron ore tailings.                                                                             | <i>Minerals Engineering. 165, 106848</i>                   | 2021                   |
| 58. | P. Puhan, A. Awasthi, <b>A.K. Mukherjee</b> & A. Atta.                              | CFD modelling of segregation in binary solid-liquid fluidized beds: Influence of liquid viscosity and density.                                                         | <i>Chemical Engineering Science. 246, 116965.</i>          | 2021                   |
| 59. | S. J. Anzoom, S.K. Tripathy, L. Sahu, S. Bhattacharya & <b>A.K. Mukherjee.</b>      | Influence of impeller speed and cell volume on coal flotation performance in self-aerating flotation machine.                                                          | <i>Advanced Powder technology, 31(9), 4053 – 4063.</i>     | 2021                   |
| 60. | S. Dey, A.S. Patra, P. Patra, B. Saha, A.K. Mukherjee & S Pal                       | Macromolecular selective flocculant derived from functionalized starch towards beneficiation of low-quality iron ore: Atomistic simulation and                         | <i>Materials Today Communications. 32, 103810.</i>         | 2022                   |

experimental studies.

61. B. Saha, A.S. Patra, & **A.K. Mukherjee**. Insights on the initial stages of carbonisation of Sub-bituminous coal. *Journal of Molecular Graphics and Modelling*. 106, 107868 2021
62. A.S. Patra, A. Basu, A. Biswas, A. Das, S.J. Anzoom & **A.K. Mukherjee**. Synergistic effect of polar group containing collectors and synthesized frother on flotation performance of oxidized coal. *International Journal of Coal Processing & Utilization*. 41(5), 307 – 320. 2021
63. B. Saha, A.S. Patra, A. Biswas, **A.K. Mukherjee**. Interaction of grafted dextrin with a hematite surface: effect of functional groups and molecular weight. *Chemistry Select*. 6(31) 8165 – 8170. 2021
64. P. Kopparthi, D. Sachinraj, A. Awasthi, **A.K. Mukherjee** & A. Rajan. Intermediate size fine coal beneficiation by Reflux™ classifier using statistical approach. *Powder Technology*. 361, 548 – 561. 2021
65. P. Puhan, **A.K. Mukherjee** & A. Atta. Insights into the influence of particle density and column inclination in polydisperse liquid-solid fluidized bed. *Powder Technology*. 425, 118540. 2023
66. V. Singh, S. Nag, N.G. Srikakulapu & **A.K. Mukherjee**. Development of a novel magnetic separator for segregation of minerals of dissimilar electromagnetic properties. *Minerals Engineering*. 193, 108009. 2023
67. D. Sachinraj, P. Kopparthi, P. Samanta & **A. K. Mukherjee**. Optimization of column flotation for fine coal using Taguchi method. *Transaction of the Indian Institute of Metals*. 75(5), 1255 – 1267. 2022
68. P. Patra, A. S. Patra, **A.K. Mukherjee** & S. Pal. Development of a highly efficient selective flocculant based on functionalized  $\beta$  – Cyclodextrin towards beneficiation of low-quality iron ore. *Polymers for Advanced Technologies*. 32(5), 2169 – 2175. 2021
69. P. Puhan, **A.K. Mukherjee** & A. Atta. Analysing the influence of key model parameters in two-fluid CFD modelling of an inclination – augmented liquid-solid fluidized bed. *Industrial & Engineering Chemistry Research*. 62(44), 18755 – 18779. 2023
70. B. Saha, A.S. Patra, A. Das, A. Basu, **A.K. Mukherjee**. Role of collector polarity and size on the low-rank fine coal flotation. *International Journal of Coal Processing & Utilization*. 43(2), 203 – 216. 2023
71. N.G. Srikakulapu, S.S. Cheela, V.K. Bari, **A.K. Mukherjee** & A.K. Bhatnagar. Effect of polymer flow aids on LD iron ore flowability. *Powder Technology*. 377, 523 – 533. 2021
72. B. Saha, S. Pramanik, A. Das, A.S. Patra, **A.K. Mukherjee** & S. Maity. Molecular level structure development of Indian coal using experimental, ML and DFT techniques. *Journal of Molecular Structure*. 1031, 137346. 2024
73. P. Puhan, **A.K. Mukherjee** & A. Atta. Multi-fluid Eulerian simulation of combined size and density varying binary mixtures in an inclined channel: Influence of particle density *15<sup>th</sup> International Conference on Gas-Liquid & Gas-liquid-Solid Reactor Engineering*. 2022

difference.

|     |                                                                                             |                                                                                                                                                |                                                                                        |       |
|-----|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-------|
| 74. | M.N. Azad, A.S. Patra, D Sachinraj, P. Samanta, <b>A.K. Mukherjee</b> & G.F. Taraporewalla. | New process for recovery of ultra fine coal by pre-treatment with surfactant.                                                                  | <i>Mining, Metallurgy &amp; Exploration</i> . 38, 2517 – 2526.                         | 2021  |
| 75. | S.N. Gurulaxmi, T.K. Ghosh, <b>A.K. Mukherjee</b>                                           | State of art characterisation study of banded hematite jasper for the purpose of beneficiation.                                                | <i>Proceedings of the XI International Seminar of Mineral Processing Technology</i>    | 2010  |
| 76. | J. S. Thella, <b>A.K. Mukherjee</b> , Y. Rajasekhar.                                        | Recovering iron values from iron ore slime using cationic and anionic collectors.                                                              | <i>Proceedings of the XI International Seminar on Mineral Processing Technology</i> .  | 2010  |
| 77. | S.J. Anzoom, S.K. Tripathy, A. Dubey, R. Singh, <b>A.K. Mukherjee</b>                       | Comparative response of flotation of coal by using process and de-ionized water.                                                               | <i>Mineral Processing and Extractive Metallurgy Review</i> . 41(6), 361 – 369.         | 2020  |
| 78. | A. Singh, V. Singh, A.S. Patra, P. Dixit, <b>A.K. Mukherjee</b> .                           | Review on high phosphorus in iron ore: Problem and way out.                                                                                    | <i>Mining, Metallurgy &amp; Exploration</i> . 41(3) 1497 – 1507.                       | 2024  |
| 79. | A.S. Patra, P. Patra, S. Chowdhury, <b>A.K. Mukherjee</b> .                                 | Catatonically functioned amylopectin as an efficient flocculant for treatment of coal suspension.                                              | <i>Colloids and Surfaces A: Physio-chemical and Engineering Aspects</i> . 586, 124229. | 2020  |
| 80. | P. Kopparthi, B. Vadlakonda, N. Mangadoddy, <b>A.K. Mukherjee</b> .                         | Column flotation hydrodynamics operating in the heterogeneous regime estimated by electrical resistance tomography and multi-phased CFD model. | <i>International Journal of Coal Preparation and Utilization</i> . 1 - 25.             | 2024. |

## Annexure – II

### Conferences/Symposia/Seminars

| No | Full Name of Author                                        | Title of Paper                                                                                  | Name of the Conference                                                                | Year of Publication |
|----|------------------------------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------|
| 1. | <b>A.K. Mukherjee</b> , R.K. Dutta and P.V.T. Rao          | Development of mathematical model for prediction of washery performance at Jamadoba, Tata Steel | <i>Indian Conference on Computer Application in Mineral Industry</i>                  | 2001                |
| 2  | <b>A.K. Mukherjee</b> , P.V.T. Rao, and N.D. Rao           | Optimisation study of hydrocyclone operation at chrome ore beneficiation plant, Sukinda         | <i>Application of Chemical Engineering for Utilization of Natural Resources</i> .     | 2001                |
| 3. | <b>A.K. Mukherjee</b> , R. Sripriya, P.V.T. Rao and P. Das | Effect of Increase in Feed inlet Pressure on Feed rate of Dense Media Cyclone                   | <i>Raw Material Preparation for Metallurgical Industries Problems and Solutions</i> . | 2002                |

|     |                                                                                                       |                                                                                                                |                                                                                                    |      |
|-----|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------|
| 4   | <b>A.K. Mukherjee</b> and B.K. Mishra                                                                 | Study of mixing and stratification of particles in a fluidized bed                                             | NMD-ATM 2003                                                                                       | 2003 |
| 5   | <b>A.K. Mukherjee</b> and B.K. Mishra                                                                 | Study of particle separation by fluidization                                                                   | NMD – ATM 2004                                                                                     | 2004 |
| 6.  | M. China, R. Sriprya, S.K. Rai and <b>A.K. Mukherjee</b>                                              | Process audit of Noamundi iron processing plant; The effect of feed ratio                                      | <i>International Conference of Emerging Trends in Mineral Processing and Extractive Metallurgy</i> | 2005 |
| 7.  | Satish Rai, M. China, <b>A.K. Mukherjee</b> , A. Das, R. Ranjan, R.R. Satpathy,                       | Process study of Joda East washing plant, Tata Steel                                                           | <i>International Seminar on Mineral Processing Technology</i>                                      | 2006 |
| 8.  | <b>A.K. Mukherjee</b> , B.K. Mishra                                                                   | A comprehensive study to understand the role of process parameters in jigging                                  | <i>International Seminar on Mineral Processing Technology.</i>                                     | 2006 |
| 9.  | <b>A.K. Mukherjee</b> , P. Gupta, S.K. Sit, M.C. Thomas, B.K. Mishra                                  | Method to evaluate the role of feed characteristics in iron ore beneficiation plant                            | <i>Mineral Processing Technology (MPT- 2007)</i>                                                   | 2007 |
| 10. | <b>A.K. Mukherjee</b> , Paromita Biswas, P.K. Banerjee                                                | Iron slime characterisation to explore beneficiation prospects                                                 | <i>Mineral Processing Technology (MPT-2008).</i>                                                   | 2008 |
| 11. | S.N. Gurulaxmi, T.K. Ghosh and <b>A.K. Mukherjee</b>                                                  | State of art characterisation study of Banded Hematite Jasper                                                  | <i>Mineral Processing Technology (MPT-2008).</i>                                                   | 2008 |
| 12  | John Samuel Thella. <b>A.K. Mukherjee</b> , Y Rajshekar                                               | Recovering iron values from iron slimes using cationic and anionic collector                                   | <i>Mineral Processing Technology (MPT-2008).</i>                                                   | 2010 |
| 14. | John Samuel Thella, Manish Kumar Jha, Gurulaxmi, S.N., <b>Asim Kumar Mukherjee</b>                    | Classification of high alumina iron ore slimes                                                                 | <i>Mineral Processing Technology (MPT-2011).</i>                                                   | 2011 |
| 15. | S.N. Gurulaxmi, <b>A.K. Mukherjee</b> , John Samuel Thella                                            | Feasibility study for beneficiation of Banded Hematite Jasper iron ores                                        | <i>Mineral Processing Technology (MPT-2011).</i>                                                   | 2011 |
| 16. | Atanu Banerjee, <b>A.K. Mukherjee</b>                                                                 | Method to establish theoretical yield-grade relation for Indian iron ore slime through quantitative mineralogy | <i>Mineral Processing Technology (MPT-2011).</i>                                                   | 2011 |
| 17. | Abhay Shankar Patra, Dilip Makhija, B.D. Mohanty, Ashish Sharma, Nirmal Sarkar, <b>A.K. Mukherjee</b> | Reduction of moisture in classifier fines by the addition of surfactant                                        | NMD-ATM 2012                                                                                       | 2011 |

18. P. Dixit, R. Tiwari, A.S. Patra, **A.K. Mukherjee**, P.K. Banerjee Water-split behaviour in laboratory scale 50 mm diameter stub cyclone treating iron ore slime *MPT 2013 at IMMT Bhubaneswar* 2013
19. D. Makhija, A.S. Patra, B.D. Mohanty, **A.K. Mukherjee** Clay dispersion in iron ore fines – A cost effective approach to improve metallurgical performance. *NMD-ATM 2012* 2012
20. **A.K. Mukherjee**, D. Makhija, A.S. Patra, T.K. Ghosh Process recover iron values from high alumina Indian iron ore slime – a bench scale study. *International Mineral Processing Congress at Santiago, Chile* 2014
21. **A.K. Mukherjee** and S.N. Gurulaxmi, New Float – Sink apparatus and its use in the mineral industry *International Mineral Processing Congress at New Delhi* 2012
22. S.N. Gurulaksmi and **A.K. Mukherjee** Beneficiation prospects of sub-grade iron ore plant rejects. *Mineral Processing Technology (MPT – 2014)* 2015
23. P. Dixit, D. Makhija, A.K. Mukherjee, A. Sharma, **A.K. Bhatnagar**. Beneficiation study on low grade iron ore fines for sustainable development of steel industry. *Mineral Processing Technology (MPT – 2014)* 2015
24. P. Kopparthi, Rashmi Singh, D. Nag, **A.K. Mukherjee**. Maceral enrichment by column flotation. *Mineral Processing Technology (MPT – 2014)* 2015
25. Dilip Makhija and **A.K. Mukherjee**. Effect of undersize misplacement on Bond work index calculation. *Mineral Processing Technology (MPT – 2014)* 2015
26. S.N. Gurulaxmi, J.S. Thella, **A.K. Mukherjee**, P.Dixit. Flotation studies of Banded Hematite Jasper iron ore. *International Mineral Processing Congress at New Delhi* 2012
27. Dilip Makhija and **A.K. Mukherjee** Pre-concentration of Banded Hematite Jasper – A comparative study *Ore & Fines – LGO 2013* 2013
28. P. Dixit, A. Dubey, A.S. Patra, **A.K.. Mukherjee**. Effect of various parameter on settling behaviour of ultrafine particles of iron ore. *Mineral Processing Technology (MPT – 2016)* 2016
29. S. Jaiswal, A. Das, M.P. Sinha, S. Bhattacharya and **A.K. Mukherjee** Flotation performance evaluation of the coals of Jharia region using release analysis. *Mineral Processing Technology (MPT – 2016)* 2016
30. **A.K. Mukherjee**, D. Utilization of high alumina *Mineral Processing* 2016

|     |                                                                              |                                                                                                                                                            |                                                   |      |
|-----|------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|------|
|     | Makhija, A.S. Patra, P. Dixit, D.K. Das, & S.K. Das                          | Indian iron ore slime – A pilot scale study.                                                                                                               | <i>Technology (MPT – 2016)</i>                    |      |
| 31. | D. Makhija, P. Dixit, <b>A.K. Mukherjee</b>                                  | Re-jigging of jig tailings to recover blast furnace grade iron ore concentrate                                                                             | <i>Mineral Processing Technology (MPT – 2016)</i> | 2016 |
| 32. | P. Kopparthi, M.K. Singh, <b>A.K. Mukherjee</b>                              | Column flotation with novel external sparger for fine coal                                                                                                 | <i>Mineral Processing Technology (MPT – 2016)</i> | 2016 |
| 33. | Sachinraj. D, P. Kopparthi, <b>A.K. Mukherjee</b>                            | New external sparger for column flotation                                                                                                                  | <i>Mineral Processing Technology (MPT – 2017)</i> | 2017 |
| 34. | P. Kopparthi, T. Gouricharan, <b>A.K. Mukherjee.</b>                         | Optimization of vibratory basket centrifuge (VBC) to reduce coarse clean coal moisture.                                                                    | <i>Mineral Processing Technology (MPT – 2017)</i> | 2017 |
| 35. | D. Bhargava, P. Kopparthi, S.K. Sit, D.P. Chakraborty, <b>A.K. Mukherjee</b> | Performance comparison of fine coal beneficiation (-0.5 mm & -0.25mm) in different flotation technologies – a case study of Tata Steel West Bokaro washery | <i>Asia Steel – 2018 at Bhubaneswar</i>           | 2018 |
| 36. | P. Kopparthi, D. Sachinraj, A. Awasthi, D. Bhargava, <b>A.K. Mukherjee</b>   | Beneficiation of coking coal fines by Reflux classifier                                                                                                    | <i>Asia Steel – 2018 at Bhubaneswar</i>           | 2018 |
| 37. | Tamal K Ghosh and <b>A.K. Mukherjee</b>                                      | Application of automated mineralogy in selection of raw materials for steel manufacturing                                                                  | <i>Asia Steel – 2018 at Bhubaneswar</i>           | 2018 |
| 38. | P. Dixit, D. Makhija, <b>A.K. Mukherjee</b> , A. Sharma, A. K Bhatnagar.     | Beneficiation study of low grade iron ore fines for sustainable development of steel industry.                                                             | <i>Asia Steel – 2018 at Bhubaneswar</i>           | 2018 |
| 39. | P. Dixit, D. Makhija, <b>A.K. Mukherjee</b> , A. Sharma, A. Bhatnagar        | Optimization study of settling process for ultrafine particles of iron ore slimes                                                                          | <i>Mineral Processing Technology (MPT – 2017)</i> | 2017 |

---

|     |                                                                        |                                                                       |              |      |               |
|-----|------------------------------------------------------------------------|-----------------------------------------------------------------------|--------------|------|---------------|
| 61. | A polymer optimizing unit.                                             | Anish Dubey, Abhay Shankar Patra, <b>Asim Kumar Mukherjee.</b>        | 202231019759 | 2022 | <i>Filed.</i> |
| 62. | A compound, process of preparing the compound and application thereof. | Abhay Shankar Patra, Prem Kumar Begari & <b>Asim Kumar Mukherjee.</b> | 201831004075 | 2018 | <i>Filed</i>  |

---

