

SCI Journal Publication 2023.

1. Agarwalla, Hridesh and Das, Tarit Baran and Senapati, Rabinarayan and Gangopadhyay, Monalisa and Mastro, Reginald E. and Kumar, Manish and Singh, Vikram (2023) [Mercury in coal from south eastern coalfield and mercury partitioning at sub-critical coal-fired power plant](#). Journal of Material Cycles and Waste Management. Vol. 25, No. 5, [Sept. SCI, IF 1.974](#)
2. Bharti, Abhay Kumar and Singh, Satyendra K. and Pal, Sanjit Kumar and Singh, Krishna Kant Kumar and Prakash, Amar and Bhattacharjee, Rana and Kumar, Lalan (2023) [Electrical resistivity tomography technique coupled with numerical modelling: A case study for stability analysis](#). Geophysical Prospecting. pp. 1-17. [SCI, IF 1.556, May](#)
3. Chauhan, Vishal and Chavan, Prakash D. and Singh, Rupesh K. and Saha, Sujana and Datta, Sudipta and Dhaigude, Nilesh D. and Sahu, Gajanan and Saw, Shiva K (2023) [Estimating the requirements of pressure drop during fluidization-bubbling regimes in fluidized bed with different conical distributors](#). Particulate Science and Technology. [SCI, IF 1.619, Jan](#)
4. Das, Arka Jyoti and Mandal, Prabhat Kumar and Ghosh, Nilabjendu and Singh, Awanindra Pratap and Kumar, Ranjan and Tewari, Subhashish and Bhattacharjee, Rana (2023) [Evaluation of energy accumulation, strain burst potential and stability of rock mass during underground extraction of a highly stressed coal seam under massive strata-a field study](#). Engineering Geology, 322. SCI, IF 4.779, Sept
5. Gopinathan, P. (2023) [Exploring the potential of sulphur forms in Northeastern Indian coals: Implications in environmental remediation and heavy metal sensing](#). Chemosphere, 338. SCI, IF 5.778 Oct.
6. Gopinathan, P. and Maity, Sudip and Saha, Sujana (2023) [Characterization of lignite deposits of Barmer Basin, Rajasthan: insights from mineralogical and elemental analysis](#). Environmental Geochemistry and Health, Vol. 45, No. 8, [August ISSN 0269-4042, SCI, IF 3.472](#)
7. Gopinathan, P. (2023) [Human Health Risks due to Exposure to Water Pollution: A Review](#). Water, 15 (14). [SCI, IF 2.544 July](#)
8. Gopinathan, P. (2023) [Environmental impact and health risk assessment due to coal mining and utilization](#). Environmental Geochemistry and Health, 45. pp. 6915-6922. ISSN 0269-4042 [OCT SCI IF 3.472](#)
9. Hazra, Bodhisatwa and Singh, Ashok K Singh and Sethi, Chinmay and Wood, David A (2023) [Experimental protocols to determine reliable organic geochemistry and geomechanical screening criteria for shales](#). Journal of Earth System Science. Vol. 132, No. 2 [June, SCI, IF 1.423](#)
10. Kumar, Gaurav and Kumar, Ranjan and Mandal, Prabhat Kumar and Das, Arka Jyoti (2023) [Evaluation of a novel pyramidal design of rock bolt bearing plate using analytical, experimental, and numerical methods](#). Engineering Structures, 297. [SCI](#)
11. Kumar, Ranjan and Mandal, Prabhat Kumar and Ghosh, Nilabjendu and Das, Arka Jyoti and Banerjee, Gautam (2023) [Design of Stable Parallelepiped Coal Pillars Considering Geotechnical Uncertainties](#). Rock Mechanics and Rock Engineering, 56 (9). pp. 6591-6602. ISSN 0723-2632, [SCI](#)

12. Mandal, Tuhin and Mishra, Shiv Rag and Singh, Kartikey and Agarwalla, Hridesh and Masto, Reginald Ebhin and Kumar, Manish and Singh, Vikram (2023) Fluorescent carbon nanomaterials from coal and its derivatives: structure, properties, and applications. *Journal of Nanoparticle Research*. Vol. 25 No. 6, June SCI, IF 2.132
13. Mandal, Tuhin and Mishra, Shiv Rag and Singh, Vikram (2023) *Comprehensive advances in the synthesis, fluorescence mechanism and multifunctional applications of red-emitting carbon nanomaterials*. *Nanoscale Advances*. IF 4.7 SEPT.
14. Mohanty, Debadutta (2023) *Negative $\delta^{13}\text{C}_{\text{carb}}$ excursions within early part of the Lomagundi event recorded in the Paleoproterozoic sedimentary carbonates, Aravalli Supergroup, Rajasthan India: Chemostratigraphy and basin evolution*. *Precambrian Research*. pp. 1-23. SCI IF 4.427
15. Mohanty, Debadutta (2023) *Organic Petrological Facets and the Evolution of Paleomire, Matasukh Lignite Deposits, Rajasthan, India*. *Journal of the Geological Society of India*, 99. pp. 1372-1378. SCI IF 0.900
16. Mohanty, Debadutta (2023) *Development of Empirical and Artificial Neural Network Model for the Prediction of Sorption Time to Assess the Potential of CO₂ Sequestration in Coal*. *ACS Omega*. pp. 1-23. SCI IF 2.870
17. Mohanty, Debadutta (2023) *Phosphorous concentration in iron-rich rocks of the Chilpi Group, Bastar Craton, India: implications on late Palaeoproterozoic seawater palaeo-productivity*. *Geological Magazine*, 160 (9). pp. 1372-1378. SCI IF 2.365
18. Paul, Avinash and Prakash, Amar and Singh, Ajoy Kumar and Porathur, John Loui (2023) *Modelling of Fragile Coal Mine Roof and Estimation of Rock Loads—Some Empirical and Numerical Methods*. *Mining, Metallurgy & Exploration*. SCI, IF Sept
19. Prakash, Amar and Bharti, Abhay Kumar and Paul, Avinash (2023) *Multiphase assessment of post-mining effect on railway structures: A case study of Jharia Coalfield*. *Journal of Earth System Science*. SCI
20. RAM, Lal Chand (2023) *A characteristic-based decision tree approach for sustainable energy applications of biomass residues from two major classes*. *Fuel*, 339. ISSN 0016-2361, SCI, IF 5.578, May
21. Ram, Lal Chand (2023) *Bio-coke: A sustainable solution to Indian metallurgical coal crisis*. *Journal of Analytical and Applied Pyrolysis*, 171. pp. 1-15. SCI, IF 3.905, May
22. Ram, Lal Chand (2023) *Feedstock and pyrolysis conditions affect suitability of biochar for various sustainable energy and environmental applications*. *Journal of Analytical and Applied Pyrolysis*, 170. SCI, IF 3.905, March
23. Santosh, M. S. and Dileepkumar, V. G. and Gopinathan, P. and Kumar, M. (2023) *Natural sub-bituminous coal as filler enhances mechanical, insulation and flame retardant properties of coir–polypropylene bio-composites*. *Environ Geochem Health*. Vol. 45, No. 10, SCI, IF 3.472 Oct
24. Santosh, M.S. and Dileep Kumar, V.G. (2023) *Dopant-induced photodegradation of organic water pollutants using cobalt oxide nanostructures of low cytotoxicity*. *Journal of Environmental Chemical Engineering*, 11 (2). SCI, IF 4.300 April

25. Santosh, M.S. and Dileep Kumar , V.G. and Kumari, Sandhyawasini and Khan, Afaq Ahmad and Balaji, K.R (2023) Singlet oxygen driven enhanced photocatalytic degradation of 1,3,7-trimethylpurine-2,6-dione using surfactant mediated PVA-CuO nanocomposites: Combining physical adsorption and photocatalysis. *Chemical Engineering Journal*, 462. **SCI, IF 10.652 April**
26. Santosh M S and Balaji, K R and Gopinathan , P and Kumar, Manish (2023) Non-Coking coal as an additive to enhance properties of groundnut shell reinforced polypropylene composites. *Journal of Thermoplastic Composite Materials*. pp. 1-15. **SCI, IF 1.529 March**
27. Santosh, M.S. (2023) *Nanofiltration membranes composed of carbonized giant cane and Pongamia meal binder for ion sieving in water and molecular sieving in organic solvents*. *Sustainable Materials and Technologies*, 35. **SCI**
28. Santosh, M.S. (2023) *3D-Printed Nanoscale-Thick Silver Thin Films for Electrochemical Sensing*. *ACS Applied Nano Material* , 6 (5). pp. 3303-3311. **SCI**
29. Santosh, M.S. (2023) *Numerical investigation on structural stability and explicit performance of high-pressure hydrogen storage cylinders*. *International Journal of Hydrogen Energy*, 48 (14). pp. 5565-5575. **SCI**
30. Santosh, M.S. (2023) *Symmetric supercapacitors based on copper–antimony chalcogenides: A trade-off between S and Se*. *Ceramics International*, 49 (2). pp. 1756-1763. **SCI**
31. Saw, Shiva Kumar and Datta,, Sudipta and Chavan, P.D and Gupta, Pavan K. and Kumar, Shweta and Sahu, Gajanan and Chauhan, Vishal (2023) Significance and influence of various promoters on Cu-based catalyst for synthesizing methanol from syngas: A critical review. *Journal of Chemical Technology and Biotechnology*. Vol. 98, No. 5, **May, SCI, IF 2.750**
32. Singh , Siddharth, Hazra, B. (2023) Trace element contamination in soils surrounding the open-cast coal mines of eastern Raniganj basin, India. *Environmental Geochemistry and Health*, vol. 45.No.10, pp. 7275-7302. ISSN 0269-4042 **SCI, IF 3.472 Oct**
33. Singh,, Rupesh Kumar and Dhaigude, Nilesh D. and Sahu, Arti and Chauhan, Vishal and Sahu, Gajanan and Saha, Sujan and Chavan, Prakash D. (2023) Significance of temperature and pressure on minimum fluidization velocity in a fluidized bed reactor: An experimental analysis. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, 45 (1). pp. 1793-1806. ISSN 1556-7036 **SCI, IF 1.184 Feb**
34. Singh, Neelratan (2023) *The Longleaf Tree-Ring Network: Reviewing and expanding the utility of Pinus palustris Mill. Dendrochronological data*. *Progress in Physical Geography: Earth and Environment*, 47 (4). **SCI**