

Dr. S. SHANTHAKUMAR –PUBLICATION DETAILS

1. J. Umamaheswari and **S. Shanthakumar**, "Paddy-soaked rice mill wastewater treatment by phycoremediation and feasibility study on use of algal biomass as biofertilizer", Journal of Chemical Technology and Biotechnology, Published online on 20 August 2020.
2. J. Umamaheswari, M.S. Kavitha and **S. Shanthakumar**, "Outdoor cultivation of *Chlorella pyrenoidosa* in paddy-soaked wastewater and a feasibility study on biodiesel production from wet algal biomass through in-situ transesterification", Biomass and Bioenergy, Vol. 143, 105853, 2020.
3. J. Umamaheswari, T. Bharathkumar, **S. Shanthakumar** and K. M. Gothandam, "A feasibility study on optimization of combined advanced oxidation processes for municipal solid waste leachate treatment", Process Safety and Environmental Protection, Vol. 143, pp 212 - 221, 2020.
4. D. Saranya and **S. Shanthakumar**, "Effect of culture conditions on biomass yield on acclimatized microalgae in ozone pre-treated tannery effluent: A simultaneous exploration of bioremediation and lipid accumulation potential", Journal of Environmental Management, Vol. 273, 111129, 2020.
5. G. Velvizhi, **S. Shanthakumar**, Bhaskar Das, A. Pugazhendhi, T. Shanmuga Priya, B. Ashok, K. Nanthagopal, R. Vignesh and C. Karthick, "Biodegradable and non-biodegradable fraction of municipal solid waste for multifaceted applications through a closed loop integrated refinery platform: Paving a path towards circular economy", Science of the Total Environment, Vol. 725, 138049, 2020.
6. G. Sujatha, **S. Shanthakumar** and Fulvia Chiampo, "UV light-irradiated photocatalytic degradation of coffee processing wastewater using TiO₂ as a catalyst", Environments, Vol. 7, 47, 2020.
7. D. Saranya and **S. Shanthakumar**, "An integrated approach for tannery effluent treatment with ozonation and phycoremediation: A feasibility study", Environmental Research, Vol. 183, 109163, 2020.
8. J. Umamaheswari and **S. Shanthakumar**, "Optimization of Temperature and Inoculum Size for Phycoremediation of Paddy-soaked Rice Mill Wastewater", Journal of Environmental Engineering, ASCE, Vol. 146 (1), 04019091, 2020.
9. G. Vijayaraghavan and **S. Shanthakumar**, "Removal of Crystal Violet dye in textile effluent by coagulation using algal alginate from brown algae *Sargassum* sp.", Desalination and Water Treatment, Vol. 196, pp 402 - 408, 2020.
10. Jilu Varghese, Mohammed Rehaan Chandan and **S. Shanthakumar**, "Fixed Bed Column Study for Pesticide Removal Using Silver Nanoparticles-embedded Polyurethane Foam and Glass Beads", Chemical Engineering Communications, Vol. 207(10), pp 1337 - 1346, 2020.
11. A. Dhamodharan, S. Abinandan, U. Aravind, G. P. Ganapathy and **S. Shanthakumar**, "Distribution of Metal Contamination and Risk Indices Assessment of Surface Sediments from Cooum River, Chennai, India", International Journal of Environmental Research, Vol. 13, pp 853 - 860, 2019.

12. R. Anjali and **S. Shanthakumar**, "Insights on the Current Status of Occurrence and Removal of Antibiotics in Wastewater by Advanced Oxidation Processes", Journal of Environmental Management, Vol. 246, pp 51 - 62, 2019.
13. J. Umamaheswari and **S. Shanthakumar**, "Phycoremediation of Paddy-soaked Wastewater by Indigenous Microalgae in Open and Closed Culture System", Journal of Environmental Management, Vol. 243, pp 435 - 443, 2019.
14. D. Saranya and **S. Shanthakumar**, "Opportunities for Phycoremediation Approach in Tannery Effluent: A Treatment Perspective", Environmental Progress & Sustainable Energy, Vol. 38 (3), pp 1 - 13, 2019.
15. D. Saranya and **S. Shanthakumar**, "Green Microalgae for Combined Sewage and Tannery Effluent Treatment: Performance and Lipid Accumulation Potential", Journal of Environmental Management, Vol. 241, pp 167 - 178, 2019.
16. J. Umamaheswari and **S. Shanthakumar**, "Phytoremediation of Nutrient Overloaded Soil by Rice Mill Wastewater using *Amaranthus palmeri* and *Sorghum vulgare*", Environmental Progress & Sustainable Energy, Vol. 38 (2), pp 354 - 361, 2019.
17. G. Vijayaraghavan and **S. Shanthakumar**, "Effective removal of Acid Black 1 dye in textile effluent using Alginate from brown algae as a coagulant", Iranian Journal of Chemistry and Chemical Engineering, Vol. 37 (4), pp 145 - 151, 2018.
18. G. Vijayaraghavan and **S. Shanthakumar**, "Effective removal of Reactive Magenta dye in textile effluent by coagulation using Algal Alginate", Desalination and Water Treatment, Vol. 121, pp 22 - 27, 2018.
19. J. Chukki, S. Abinandan and **S. Shanthakumar**, "Chrysanthemum indicum microparticles on removal of hazardous Congo red dye using response surface methodology", International Journal of Industrial Chemistry, Vol. 9, pp 305 - 316, 2018.
20. Dilbagh Singh, V. Sowmya, S. Abinandan and **S. Shanthakumar**, "Removal of Malachite Green Dye by *Mangifera indica* Seed Kernel Powder", Journal of The Institution of Engineers (India): Series A, Vol. 99 (1), pp 103 - 111, 2018.
21. Sowmya Vilvanathan and **S. Shanthakumar**, " Ni^{2+} and Co^{2+} adsorption using *Tectona grandis* biochar: kinetics, equilibrium and desorption studies", Environmental Technology, Vol. 39 (4), pp 464 - 478, 2018.
22. S. Pavithra and **S. Shanthakumar**, "Removal of COD, BOD and Color from Municipal Solid Waste Leachate using Silica and Iron nano particles - A Comparative Study", Global NEST Journal, Vol. 19, pp 122 - 130, 2017.
23. S. Ramya and **S. Shanthakumar**, "Investigation on potential reuse of textile sludge as fertiliser and for preparation of solid blocks", International Journal of Environment and Waste Management, Vol. 19, pp 105 - 116, 2017.
24. Sowmya Vilvanathan and **S. Shanthakumar**, "Modeling of fixed-bed column studies for removal of cobalt ions from aqueous solution using *Chrysanthemum indicum*", Research on Chemical Intermediates, Vol. 43, pp 229 - 243, 2017.
25. Sowmya Vilvanathan and **S. Shanthakumar**, "Column Adsorption Studies on Nickel and Cobalt Removal from Aqueous Solution Using Native and Biochar Form of *Tectona grandis*", Environmental Progress & Sustainable Energy, Vol. 36 (4), pp 1030 - 1038, 2017.

26. Sowmya Vilvanathan and **S. Shanthakumar**, "Continuous biosorption of nickel from aqueous solution using Chrysanthemum indicum derived biochar in a fixed-bed column", Water Science and Technology, IWA, Vol. 76 (7), pp 1895 - 1906, 2017.
27. Sowmya Vilvanathan and **S. Shanthakumar**, "Removal of Ni (II) and Co (II) ions from aqueous solutions using Teak (Tectona grandis) leaves powder: Adsorption Kinetics, Equilibrium and Thermodynamics study", Desalination and Water Treatment, Vol. 57(9), pp 3995 - 4007, 2016
28. G. Vijayarghavan and **S. Shanthakumar**, "Performance study on Algal alginate as natural coagulant for the removal of Congo red dye", Desalination and Water Treatment, Vol. 57(14), pp 6384 - 6392, 2016.
29. Ruth Sherly and **S. Shanthakumar**, "A Study on Recovery of Silica and Alumina from Fly Ash", Environmental Engineering and Management Journal, Vol. 15(4), pp 835 - 839, 2016.
30. A. Dhamodharan, **S. Shanthakumar** and G.P. Ganapathy, "Assessment of Seasonal Variations in Surface Water Quality of Cooum River in Chennai, India - A Statistical Approach", Global NEST Journal, Vol. 18(3), pp 527 - 545, 2016.
31. Sowmya Vilvanathan and **S. Shanthakumar**, " Ni(II) adsorption onto Chrysanthemum indicum: Influencing Factors, Isotherms, Kinetics and Thermodynamics", International Journal of Phytoremediation, Vol. 18(10), pp 1046 - 1059, 2016.
32. J. Umamaheswari and **S. Shanthakumar**, "Efficacy of Microalgae for Industrial Wastewater Treatment - A Review on Operating Conditions, Treatment Efficiency and Biomass Productivity", Reviews in Environmental Science and Bio/Technology, Vol. 15, pp 265 - 284, 2016.
33. S. Abinandan and **S. Shanthakumar**, "Evaluation of photosynthetic efficacy and CO₂ removal of microalgae grown in an enriched bicarbonate medium", 3 Biotech, Vol. 6, 9 pages, 2016.
34. J. Chukki and **S. Shanthakumar**, "Optimization of Malachite Green Dye Removal by Chrysanthemum Indicum Using Response Surface Methodology", Environmental Progress & Sustainable Energy, Vol. 35(5), pp 1415 - 1419, 2016.
35. K. V. Roopavathi and **S. Shanthakumar**, "Adsorption Capacity of Curcuma Longa for the Removal of Basic Green1 Dye - Equilibrium, Kinetics and Thermodynamic Study", Journal of Environmental Biology, Vol. 37, pp 979 - 984, 2016.