

PUBLICATIONS FOR LAST FIVE YEARS

1. Yasvanthrajan, N.; Sivakumar, P.; Muthukumar, K.; Murugesan, T.; Arunagiri, A. Production of biodiesel from waste bio-oil through ultrasound assisted transesterification using immobilized lipase. *Environmental Technology & Innovation*. 2020 (Accepted)
2. Bejjanki, D.; Muthukumar, K.; Radhakrishnan, T. K.; Alagarsamy, A.; Pugazhendhi, A.; Mohamed, S. N.; Simultaneous bioelectricity generation and water desalination using *Oscillatoria* sp. as biocatalyst in photosynthetic microbial desalination cell. *Science of The Total Environment*, 2020 (Accepted)
3. Khadeeja, P.K.; Muthukumar, K.; Arivalagan, P.; Arun, A.; Samsudeen, N. Enhancement of biobutanol production using mixotrophic culture of *Oscillatoria* sp. in cheese whey water, *Fuel*, 2020 (Accepted).
4. Lakshmidhevi, R.; Gandhi, N. N.; Muthukumar, K. Bioelectricity and bioactive compound production in an algal assisted microbial fuel cell with immobilized bioanode, *Biomass Conversion and Biorefinery*, 2020 (Accepted).
5. Lakshmidhevi, R.; Gandhi, N. N.; Muthukumar, K. Enhanced biomass and lutein production by mixotrophic cultivation of *Scenedesmus* sp. using crude glycerol in an airlift photobioreactor, *Biochemical Engineering Journal*, 2020 (Accepted).
6. Kumar, D., & Muthukumar, K. "An overview on activation of aluminium-water reaction for enhanced hydrogen production." *Journal of Alloys and Compounds* (2020): 155189.
7. Rajakumar, M., Manickam, M., Gandhi, N. N., & Muthukumar, K. "Nickel centered metal-organic complex as an electro-catalyst for hydrogen evolution reaction at neutral and acidic conditions." *International Journal of Hydrogen Energy* (2020).
8. Lakshmidhevi, R., Gandhi, N. N., & Muthukumar, K. "Carbon Neutral Electricity Production from Municipal Solid Waste Landfill Leachate Using Algal-Assisted Microbial Fuel Cell." *Applied Biochemistry and Biotechnology* (2020): 1-15.69.
9. Mohamed, S. N., Hiran, P. A., Muthukumar, K., & Jayabalan, T. "Bioelectricity production from kitchen wastewater using microbial fuel cell with photosynthetic algal cathode." *Bioresource Technology* 295 (2020): 122226.
10. Naina Mohamed, S., Jayabalan, T., & Muthukumar, K. "Simultaneous bioenergy generation and carbon dioxide sequestration from food wastewater using algae microbial fuel cell." *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects* (2019): 1-9.
11. John, I., Pola, J., Muthukumar, K., Thanabalan, M., & Appusamy, A. "Production of bioethanol from sweet lime peel via a statistically optimized simultaneous saccharification and fermentation process using isolated enzymes." *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects* (2019): 1-9.
12. Sivanarutselvi, S., Poornima, P., Muthukumar, K., and Velan, M. "Studies on effect of alkali pretreatment of banana pseudostem for fermentable sugar production for biobutanol production." *Journal of Environmental Biology*, 40(3) (2019) 393-399.
13. Yasvanthrajan, N., Nabera, A., Salike, S., Valan, D.T., Sivakumar, P., Muthukumar, K. and Arunagiri, A. "An overview on the process intensification of microchannel reactors for biodiesel production" *Chemical Engineering and Processing - Process Intensification* 136 (2019) 163-176.
14. Ramprakash, B. and Muthukumar, K. "Influence of sulfuric acid concentration on biohydrogen production from rice mill wastewater using pure and coculture of *Enterobacter aerogenes* and *Citrobacter freundii*" *International Journal of Hydrogen Energy* 43 (2018) 9254-9258.
15. Merlyn Sujatha R. and Muthukumar, K. "Influence of pre-soaking conditions on ultrasonic extraction of *Spirulina platensis* proteins and its recovery using aqueous biphasic system" *Separation Science and Technology* 53 (2018) 2034–2043.
16. Sivanarutselvi, S., Muthukumar, K. and Velan, M. "Studies on Effect of Hydrothermal Pretreatment of Sugarcane Bagasse for Biobutanol Production" *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects* 39 (2017) 1771-1777 (Impact factor: 0.648).
17. Indulekha, J., Muthukumar, K. and Arunagiri, A. "A review on the potential of citrus waste for D-limonene, pectin and bioethanol production" *International Journal of Green Energy* 14 (2017) 599-612 (Impact factor: 1.61).

18. Ramadoss, G. and Muthukumar, K. "Ultrasound assisted metal chloride treatment of sugarcane bagasse for bioethanol production" *Renewable energy* 99 (2016) 1092-1102. (Impact factor: 3.404)
19. Manjamatha, V.P., Muthukumar, K. "Pretreated lignocellulosic waste mediated biosynthesis of silver nanoparticles under room temperature" Accepted for publication in *International Journal of Nanoscience* (2016).
20. Madhumathi, R., Muthukumar, K., Velan, M. "Optimization of polyhydroxybutyrate Production by *Bacillus safensis* EBT1" *Clean – Soil, Air, Water* 44 (8), 1066–1074 (2016). (Impact factor 1.716)
21. Manjamatha, V.P., Muthukumar, K. "Ultrasound assisted green synthesis of silver nanoparticles using weed plant" *Bioprocess and Biosystems Engineering* 39 (3) (2016) 401-411. (Impact factor: 1.901 Cited by 2)
22. Ramprakash, B and Muthukumar, K. "Biohydrogen production from rice mill wastewater using mutated *Enterobacter aerogenes*" *Engineering in Agriculture, Environment and Food* 9 (1), (2016)109-115.
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28. Yigezu Z.D. and Muthukumar, K. "Biofuel production by catalytic cracking of sunflower oil using vanadium pentoxide" *Journal of Analytical and Applied Pyrolysis* 112 (2015) 341-347. (Impact factor: 3.56, Cited by:4)
29. Vijayalakshmi, S.R. and Muthukumar, K. "Improved biodegradation of textile dye effluent by coculture" *Ecotoxicology and Environmental Safety* 114 (2015) 23-30. (Impact factor:2.76, Citation:1)
30. Ramadoss, G. and Muthukumar, K. "Influence of dual salt on the pretreatment of sugarcane bagasse with hydrogen peroxide for bioethanol production" *Chemical Engineering Journal* 260 (2015) 178-187 (Impact factor: 4.32, Citation:17)
31. Gowthami, P. Muthukumar, K and Velan, M. "Utilization of coconut oil cake for the production of lipase using *Bacillus coagulans* VKL1" *Biocontrol science* 20 (2015) 125-133.