

Project problem statement bank

1. Study on pyrolysis and coprolysis of waste plastics and tyres
2. Agricultural waste management and manufacturing of value added products through pyrolysis
3. Design and development of pyrolyser for domestic applications
4. Extraction of sulfur from gasoline and diesel using ionic solvents
5. Manufacturing of calcium nanoparticles in micro flow reactor
6. Studies in vapour liquid equilibria of azeotropic systems
7. Microwave based synthesis of novel nanomaterials
8. Fermentation of food waste for converting into value added products
9. Treatment of e-waste and recovery of precious materials
10. Design and development of small scale hydrogen generator based on water splitting reaction
11. Bio-Detoxification of Mercuric Wastes
12. Development of environmentally benign green emulsion liquid membrane using waste cooking oil as diluents for the extraction of metals from aqueous solution
13. Efficient extraction of hydrogen from the biomass.
14. Fungi: A Potential Biofertilizer
15. Nano Catalyst In The Synthesis of Heterocycles
16. Preparation characterization and performance evaluation of alternative diesel fuel from vegetable oils
17. Studies on the Synthesis of Doped Heterogeneous Titanium Oxide Nanocomposites Using Sol Gel Method and Their Applications.
18. Study on the utilization of shrimp processing waste from seafood industries.
19. Synthesis and Characterization of Doped Nanomaterial and Their Applications in GAS Sensors
20. Synthesis and Characterization of Metal Nanoparticles and Their Application For Removal of Dyes from Wastewater.
21. Synthesis of Energy Source Material by Degradation of Plastic Waste.

22. residence time distribution in agitated thin film dryer
23. performance analysis of crystalliser in jaggery making
24. alternative ways to extract waste heat from traditional jaggery unit
25. production of jaggery powder from cane juice
26. economic analysis of jaggery unit
27. extraction of furfural from Corncob
28. extraction of furfural from bagasse
29. alcohol from potatoes and agriculture waste
30. Utilization of waste plastic for commercial purpose
31. design of dryer for bagasse drying
32. Use of Electro-Chemical Technology for Effluent Treatment
33. Recycling of used Lithium ion batteries
34. Advance oxidation process for waste water treatment
35. Application of Chitosan based adsorbents for phenol removal
36. Enzymatic conversion of lignocellulosic biomass
37. Sustainability analysis of biofuel production
38. Studies in Process development for aqueous two phase system
39. Synthesis of nanoparticles for catalytic applications
40. Production of antifungal paint for application in high precipitating region
41. Design and operation of water treatment systems using nanoparticles
42. Extraction of essential oil d-limonene from sweet orange peels
43. Extraction and formulation of perfume from lemongrass leaves
44. Manufacturing of natural pesticide from custard apple seeds
45. Application of sugarcane bagasse for the removal of chromium (vi) and zinc (ii) from aqueous solution
46. Extraction of essential oil from tamarind seeds
47. Removal of dyes using natural adsorbent
48. Removal of cadmium by using natural adsorbent
49. Biodiesel production from waste cooking oil using catalyst calcium oxide derived of limestone

50. Improved biodiesel production from waste cooking oil with mixed methanol–ethanol using enhanced eggshell-derived CaO nano-catalyst
51. Manufacturing of isopentyl acetate using isopentyl alcohol and acetic acid using etherification reaction
52. Design a method to feed Plastic to diesel converter
53. To find solution for Recycling/ reutilization of treated effluent
54. To study Feasibility of Reuse/recycling of RO reject water
55. To predict Water Quality from Mobile captured and Google earth images
56. To develop artificial intelligence enabled robotic trash boat to drive & harvest floating trash from urban drain
57. Suggest an innovative technical approach to address the air pollution and stubble burning in metro cities.
58. To suggest an innovative approach for redeveloping the centralized sewage treatment plants
59. To find all-new ways to store electric energy in bigger volume and less in size and weight.
60. To reduce CO₂ emission in Lote MIDC.
61. To improve air quality index in Lote MIDC
62. Treatment of industrial waste water by acoustic cavitations
63. Treatment of industrial waste water by Hydrodynamic cavitations
64. Decolonization of waste water containing patent blue dye by cavitations
65. Decolonization of waste water containing sunset yellow dye by cavitations
66. extraction of essential oil using acoustic levitation from a plant
67. Depolymerization of polymer using acoustic cavitations
68. Depolymerization of polymer using acoustic cavitations and microwave
69. Depolymerization of polymer using hydrodynamic cavitations
70. ultrasound assisted fermentation of waste paper pulp
71. Depolymerization of polymer using acoustic cavitations and combination with UV and ozone.