

# 50 COLLEGE CHEMISTRY

## PROJECT IDEAS

1. Trace metal groundwater transportation and quantification
2. Electrocatalysis and solar energy conversion
3. Using liquid membranes for heavy metal ion separation
4. Nanoparticles and metal oxide films for chemical destruction
5. Applications of catalysis for material synthesis
6. Synthesis of magnetic materials
7. Diels-Alder reaction applications
8. Supramolecular polymer self assembly
9. Reissert compounds for diastereoselective synthesis
10. Study of sulfonate polymers
11. Photoelectrochemistry nanomaterials
12. Study of ionic liquids at room temperature
13. Improving efficiency of solar cells with new materials
14. Aqueous interfaces and the effect of mixed salts
15. Petrochemical modeling of aggregation phenomena
16. Low energy plastic recycling methods
17. Carbon dioxide conversion through molecular catalysts
18. Converting fatty acid to fuel using cyanobacteria
19. Evaluation of disordered proteins
20. Biological systems chemistry
21. Biological systems Characterization
22. Spectroscopy
23. Fetal alcohol syndrome through alcohol poisoning
24. Flavoring through ketones and aldehydes
25. Vision chemistry
26. Chemical drivers of addiction to caffeine and nicotine
27. Polymer resins

28. Organic compound magnetic resonance
29. Sulfur and selenium biological chemistry
30. Solvent free synthesis
31. Porphrin-Fullerene crystal engineering
32. Adaptive nanopores
33. Complexes of Carrole and Boron Porphrin
34. Beryllium Chelators
35. Antimicrobial Polymers
36. Green chemistry catalysts
37. High thermal conductivity polymer synthesis
38. Magnetite adsorption of silicate
39. Flexible protein ligand binding models
40. Polypyrrolic macrocycles boron halide complexes synthesis
41. Polyurethane formulation optimization techniques
42. What pesticides are present in our tap water and at what concentrations
43. Chemical triggers to allergies
44. Environmentally friendly plastic
45. Environmentally friendly adhesives
46. Application of grapheme
47. Microbreweries best practice
48. Non petrochemical plastic creation
49. Will nuclear fusion ever be a reality
50. Hydrophobic and hydrophilic chemical applications