Possible Topics for the Chem 245 Term Paper

1. Use of proton-transfer mass spectrometry for on-line measurements of oxygenated volatile organic hydrocarbons.
2. Reactive uptake of ozone by organic surfaces serving as proxies for organic aerosols.
3. Photochemical processes occurring in the Arctic snow packs resulting in a release of Cl₂ and BrCl in the atmosphere.
5. Reactive uptake of OH and HO₂ by surfaces of atmospheric interest.
6. Field measurements of NO₃ partitioning in the Amazon forest.
8. Atmospheric lifetimes and fates of halons.
10. Chemistry and origins of iodine containing molecules in coastal air.
11. Sources and sinks of N₂O in the stratosphere.
14. Techniques for measuring HNO₃ and H₂SO₄ in the atmosphere.
15. Wavelength dependent quantum yields in photodissociation of formaldehyde.
16. The role of isotope studies in constraining sources and sinks of CO₂ in the atmosphere.
17. Remote sensing of global distribution of methylglyoxal from space.
18. Occurrence and health effects of nitro-PAHs in the greater Los Angeles area.
19. Chemical processes occurring on Sahara mineral dust particles.
20. Any other topic relevant to atmospheric chemistry you find interesting.