Drenzek, N.J., Eglinton, T.I., Heraty, L.J., Sturchio, N.C., Shiner, V.J. and Reddy, C.M., Stable chlorine and carbon isotopic compositions of selected semi-volatile organochlorine compounds, Org. Geochem, 2002; v33, 437-444

To assess whether the isotopic compn. of semi-volatile organochlorine compds. (SVOCs) may be a useful tool, we measured the bulk d37Cl and d13C values of several pesticides and Aroclor mixts. from different suppliers. Overall, the d37Cl and d13C values ranged from -5.10 to +1.22.permill. and -31.63 to -22.39.permill., resp. These values are narrower than the ranges obsd. previously for volatile org. contaminants (VOCs). In particular, the isotopic compns. of the Aroclor mixts. were very tightly constrained for both chlorine and carbon. We also obsd. that SVOCs synthesized from hexachlorocyclopentadiene had the most enriched d37Cl values. These data provide a baseline for future work employing isotope ratios to study the environmental fate of SVOCs.