Embodiments include a sensor comprising a co-polymer, the co-polymer comprising a first monomer and a second monomer. For some embodiments, the first monomer is poly-4-vinyl pyridine, and the second monomer is poly-4-vinyl pyridinium propylamine chloride. For some embodiments, the first monomer is polystyrene and the second monomer is poly-2-vinyl pyridinium propylamine chloride. For some embodiments, the first monomer is poly-4-vinyl pyridine, and the second monomer is poly-4-vinyl pyridinium benzylamine chloride. Other embodiments are described and claimed.
FIG. 1

FIG. 2
FIG. 3

PRIOR ART

FIG. 4
FIG. 5
FIG. 6