

GUIDELINES FOR THE PREPARATION OF WHITE PAPER

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Geoenvironmental Research Experience (list projects in progress or completed within the past 5 years):

Sorption and leaching of arsenic in contaminated subsurface soils
Desorbability of PCBs from contaminated lake sediments.
Extraction of Phenanthrene from subsurface soils using various extractants
Extraction of DNT from subsurface soils using various extractants
Extraction of DNT
Electrokinetic remediation of DNT contaminated soils
Soil washing of DNT contaminated soils
Chemical availability of chlorinated pesticides in soils
Bioavailability of PAHs in contaminated harbor sediments
Aerobic and anaerobic degradation of PAHs in contaminated sediments
Soil washing of PAHs in MGP site field soils
In-situ flushing of PCP contaminated soils
Bench- and pilot-scale soil washing of PCP in wood preserver contaminated soils

Geoenvironmental Teaching Experience (list related courses, including short courses, taught within the past 5 years):

Physical/Chemical Processes in Environmental Systems

Perspective on Emerging Geoenvironmental Issues and Technologies:

Compared to the developments in ex-situ remediation of contaminated soils and sediments, in-situ remediation of subsurface contamination has become more prevalent. In addition to physical/chemical treatment methods, biological treatment is included more often as an option in remediation of contaminated soils and sediments. There has been a relative decrease in applications of in-situ pump and treat technologies while there has been an increase in the development of in-situ destruction technologies, where the remediation of contaminated matrices involves the in-situ destruction of the contaminant areas and may include the destruction of the contaminant at its source. The destruction technologies include both oxidation and reduction technologies for destruction and removal of both organic and inorganic contaminants such as the in-situ injection of oxygen-release and hydrogen-release compounds .