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Contents in Context
Environmental Chemistry, Vol. 6(3), 2009

Tolerance of perennial grasses to high copper in sand culture
Peter M. Kopittke, F. Pax C. Blamey, Anna R. Sheldon and Neal W. Menzies *Environ. Chem.* **2009**, *6*, 253

Copper (Cu) is an essential element for the growth of plants, but various anthropogenic activities such as mining, smelting, disposal of wastes, and the use of Cu-containing fungicides have resulted in substantial Cu contamination at sites throughout the world. We used a sand-culture system to investigate the tolerance of seven perennial grasses to toxic levels of Cu. This study provides information to assist in the selection of grasses for the revegetation and stabilisation of Cu-contaminated sites.

Effects of vehicle type and fuel quality on the exposure risk of toxic emissions from diesel vehicles
Peter F. Nelson *Environ. Chem.* **2009**, 6, 260

Motor vehicle emissions of toxic chemicals are a major contributor to urban air pollution, and to potential human health problems. Diesel vehicles have historically been major sources of smoke and fine particles that contain a wide range of toxic species. In this study the effects of vehicle type and fuel quality on the cancer forming risk of toxic compounds in diesel exhaust are determined. It is found that the major risk is due to toxic compounds such as benzene formed during fuel combustion in the vehicle engine.

Recovery of nanosize zinc from phosphor wastes with an ionic liquid
Hsin-Liang Huang, H. Paul Wang, Edward M. Eyring and Juu-En Chang *Environ. Chem.* **2009**, *6*, 268

Very fine phosphor ashes are discharged from particulate collection systems (such as bag houses) in the cathode ray tube or television disassembling processes. Effective recovery of ZnO and ZnS nanoparticles from the phosphor ash can be achieved by extraction with a room temperature ionic liquid. By synchrotron radiation X-ray absorption spectroscopy, the obtained molecular scale data turn out to be very useful in revealing speciation of zinc in the extraction process, which also facilitates the development of a simple nanoparticle recovery method.