

Selected Newly Added Documents on EUGRIS

EUGRIS now has a new easier to use format, which I hope you will find the time to have a quick look at. 47 resources, events projects and news items were added to EUGRIS 1 -24 April 2008. These can be viewed at: <http://www.eugris.info/whatsnew.asp>

Then select the month and year for the updates you are interested in

Resources added include this selection:

Kuder, T., 2008

Modern geochemical and molecular tools for monitoring in-situ biodegradation of MTBE and TBA

EXTRACT: Methyl tert-butyl ether (MTBE) is a major gasoline oxygenate worldwide and a widespread groundwater contaminant. Natural attenuation of MTBE is of practical interest as a cost effective and non-invasive approach to remediation of contaminated sites. The effectiveness of MTBE attenuation can be difficult to demonstrate without verification of the occurrence of in-situ biodegradation. The aim of this paper is to discuss the recent progress in assessing in-situ biodegradation. In particular, compound-specific isotope analysis (CSIA), molecular techniques based on nucleic acids analysis and in-situ application of stable isotope labels will be discussed. Additionally, attenuation of tert-butyl alcohol (TBA) is of particular interest, as this compound tends to occur alongside MTBE introduced from the gasoline or produced by biodegradation of MTBE.

French, C.J., 2007

Woody biomass phytoremediation of contaminated brownfield land

Extract: Economic and environmental regeneration of post-industrial landscapes frequently involves some element of re-forestation or tree planting. We report field trials that evaluate whether woody biomass production is compatible with managing residual trace element contamination in brownfield soils. Large-scale mapping of contamination showed a heterogeneous dispersion of metals and arsenic, and highly localised within-site hotspots. Yields of Salix, Populus and Alnus were economically viable, showing that short-rotation coppice has a potentially valuable role in community forestry. Mass balance modelling demonstrated that phytoextraction potentially could reduce contamination hotspots of more mobile elements (Cd and Zn) within a 25–30-year life cycle of the crops. Cd and Zn in stems and foliage of Salix were 4–13 times higher than EDTA-extractable soil concentrations. Liability of other trace elements (As, Pb, Cu, Ni) was not increased 3 years after planting the coppice; woody biomass may provide an effective reduction of exposure to less mobile contaminants.

Joseph Rowntree Foundation (JRF), 2008

Regeneration in European cities: making connections

A study of successful urban regeneration schemes in mainland Europe that looks at Norra Alvstranden in Gothenburg, Sweden's second city; Kop van Zuid in Rotterdam, Europe's main port; and Roubaix in Metropolitan Lille, a former textile town. It makes comparisons with similar places in the UK (Gateshead, North Southwark, and Bradford). Each case study: sets the context; assesses actions and achievements; looks at benefits for vulnerable groups; and sets out the main elements of the scheme. The study, which used local researchers and involved workshops in the case study cities, concludes with ten key messages - from the need to recognise that cities are in competition to valuing the role of culture in regeneration.

European Commission, 2008

Shared Environmental Information System (SEIS)

Experiences of forest fires, floods and droughts show how much timely environmental information can make a difference during an emergency. Tackling today's environmental challenges such as adapting to climate change, managing ecosystems and natural resources in a sustainable manner, protecting biodiversity, preventing and managing environmental crises such as floods, forest fires, and water scarcity depend on the assessment of data from a variety of sectors and sources. This is why it is absolutely vital for the European Union to have an information system based on the latest information and communication technology (ICT) that will provide decision-makers at all levels (local to European) with real-time environmental data, thus allowing them to make immediate and life-saving decisions.

Sala, S., 2008

GIS-based procedure for site-specific risk assessment of pesticides for aquatic ecosystems

This paper presents a methodology developed to assess the ecotoxicological risk of pesticides to site-specific aquatic ecosystems. Spatial and relational databases, provisional models and risk indices were integrated into Geographical Information Systems (GIS) to produce maps of exposure, effect and risk at watershed scale.