BOOK OF ABSTRACTS

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Polynuclear Aromatic Hydrocarbon (PAHs) in the Thai/Laos Mekong River, 2000-2003

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Seasonal monitoring of 10 sampling stations along Thai/Laos Mekong river both water and sediment samples from Golden triangle to Kongchiam were analysed. Qualitative and quantitative analysis of the 16 priority PAHs namely, naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, dibenzo(a,h)anthracene, benzo(g,h,I,)perylene and indeno(1,2,3-c,d)pyrene were determined by EPA 8310 method using HPLC-UV. Total PAHs were measured by Fluorescense chrysene equivalents. The results show that the total amount of PAHs in the surface water and sediments were in the range of 1.1-2.8 ppb and 25-280 ppb respectively. Although the PAHs concentration is low but it does not taken into account the bioaccumulation factors which range from 69-29,000 for the PAHs analysed.